MINIMUM SEARCH SPACE AND EFFICIENT METHODS FOR STRUCTURAL CLUSTER OPTIMIZATION

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Comunicación Técnica No I-05-06/12-04-2005
(CC/CIMAT)
arXiv:math-ph/0504030 v1 8 Apr 2005
XXV Aniversario del CIMAT

Minimum search space and efficient methods for structural cluster optimization

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http://www.cimat.mx/reportes/enlinea/I-05-06.pdf

April 8, 2005

Abstract

A novel unification for the problem of search of optimal clusters under a well pair potential function is presented. My formulation introduces appropriate sets and lattices from where efficient methods can address this problem. First, as results of my propositions a discrete set is depicted such that the solution of a continuous and discrete search of an optimal cluster is the same. Then, this discrete set is approximated by a special lattice IF. IF stands for a lattice that combines lattices IC and FC together. In fact, two lattices IF with 9483 and 1739 particles are obtained with the property that they include all putative optimal clusters from 2 trough 1000 particles, even the difficult optimal Lennard-Jones clusters, C^*_{38}, C^*_{98}, and the Ino's decahedrons. C^*_{98} is the only cluster where its initial configuration has a different geometry than the putative optimal cluster in term of the adjacency matrix stated by Hoare. My paper is not a benchmark, I develop a theory and a numerical experiment for the state of the art of the optimal Lennard-Jones clusters and even I found new optimal Lennard-Jones clusters with a greedy search method called Modified Peeling Method. The paper includes all the necessary data to allow the researchers reproduce the state of the art of the optimal Lennard-Jones clusters at April 8, 2005. This novel formulation unifies the geometrical motifs of the optimal Lennard-Jones clusters and gives new insight towards the understanding of the complexity of the NP problems.

Keywords: 02.60.Pn Numerical optimization, 21.60.Gx Cluster models, 31.15.Qg Molecular dynamics and other numerical methods, 36.40.Qv Stability and fragmentation of clusters

1 Introduction

Many methods have been proposed for the problem of search of optimal clusters (SOC) [2, 4, 3, 5, 6, 7, 8, 10, 9, 13, 15, 16, 17, 18, 19, 20, 21, 24, 25, 28, 30, 31]. It takes a while until a novel method is able to validity its performance and found new putative optimal Lennard-Jones (LJ) clusters. Nowadays, Shao *et al.* are pushing the frontier of the size of the putative optimal LJ clusters over 309 particles [4, 3, 12, 30, 21, 22, 23]. The author has kept contact with this group for collaboration. Huang *et al.* [11] give equivalent formulations for LJ Potential. Xue [32] presents several properties of the LJ Potential formulation $\frac{1}{x^{12}} - \frac{2}{r^6}$. Pardalos *et al.* [18] describe the conditions of a well pair potential function and present several optimization methods for SOC.

Maranas and Floudas [16] present a method of global optimization for molecules:

> "Given the connectivity of the atoms in a molecule and the force field according to which they interact, find the molecular conformation(s) in the three-dimensional Euclidian space involving the global minimum potential energy".

This method uses the connectivity of atoms in a molecule to partitioning in several sets based on the distance of pairs of atoms. Several properties are presented and a global optimization algorithm is presented. The complexity of this algorithm is exponential over the number of variables.

Some Authors resist adding to much knowledge and heuristics for the design of an algorithm or method for SOC. However, successful methods based on molecular dynamics, molecular chemistry or physics [9, 27, 14, 31, 17, 15, 25, 7, 8, 30] reduce the Hoare complexity $\exp(-2.5176 + 0.3572n + 0.028n^2)$ [9] to a polynomial time $(0.05 \pm 0.02)n^{2.8\pm0.1}$ [8], $0.02n^{2.9}$ [4], and other polynomial times bigger than the previous ones (some can be found in [27]). However even with the help of previous knowledge, the complexity of a discrete SOC is the same of the NP class of problems, and this is the challenging impulse for the creation of novel methods. Here, I do not included an extent review of methods for SOC but some reviews are [27, 13, 18]. In addition, for the limitation of time and space is not possible to review or mention all previous methods or classify them, instead the article focus in the closed related methods under my perspective. My apologies, if I omit a relevant method but if this happens, it is without prejudice.

It is probable that methods with a good background on the knowledge of the problem and using adaptive search, simulated annealing, lattices, basin hopping, funnels, phenotypes, fusion, evolutionary, and genetic operations have advantages over other methods because they are exploring the discrete search spaces of my lattice IF (hereafter only IF, see Figs. 2, and 3). It was stated by Northby [17]:

> ”The complexity of the problem lies in the fact that while it is always possible with a computer to allow a particular initial configuration to relax to the adjacent minimum of the potential energy surface, unless the starting configuration has been chosen to lie in the proper valley, or ”catchment basin, the resulting configuration will not correspond to the absolute minimum.”

Considering this remark, the mentioned methods can relax efficiently but the global minimum could escape from the initial selection in a particular lattice, making necessary the exhaustive creation of good initial clusters from different lattices or the transformation in good ones before the relaxation. Some successful methods use random selection of clusters and particles in a random way from the well know lattices type IC, FC, ID, TO and so on. Here, my propositions close the gap stated by Northby between the initial configuration and the global minimum cluster, in the sense that exist a lattice or a set as an appropriate search space from where it is possible to repeat all the putative optimal LJ clusters reported in The Cambridge Cluster Database (CCD) [26]. As an example, a lattice and a set are presented, IF9483 and MIF1739 respectively, such that they contain particular clusters that match with the putative optimal LJ clusters from $n = 2, \ldots, 100$ in one relaxation (minimization procedure). The complexity of this type of telephone directory method on IF is at most $O(n^3)$ (the complexity of the relaxation multiplying by the complexity of the evaluation of a pair potential function for n particles). However, this is not a lower bound for the complexity of discrete methods of SOC using IF. There are cases where it is possible to reduce the numbers of operations in the evaluation of the potential of a cluster by the symmetry inherited from IF. C^*_{13} is an example where the cost of computing the potential is 4 instead of 91 operations (section 4.1 depicts this). IF allows to have automatic classification of clusters, a measurement in term of the number of adjustment for solving SOC in discrete fashion, and let to study NP complexity.

IF (as a discrete search space) coincides with the well know result from Quantum Mechanic that the particles interact in discrete fashion. Moreover, the existence of particles forming an IF can be seeing as particles in a hot temperature where the positions IC and FC could be occupied with equal likelihood. What it makes difficult to predict the geometric shape of small clusters is the mobility of the potential energy surface (PES). PES changes from small cluster to larger ones in the sense that the displacement of a particle in the outer shell from its lattice's position has more free in the small clusters than in large ones in order to reduce the total cluster energy. On the other hand, for large clusters the transition to stable structures corresponds to a change of geometrical structure from IC to a decahedral lattice [13, 23] where the PES has less freedom. Section 6 has Figures where the normalized gradient is depicted. From these figures the PES's mobility for the particles in the outer shells of a small cluster can be explained.

The notation and some conventions used in this report are given in Section 2. Section 3 describes the properties of the potential where this methodology can be applied. Sections 4 and 5 describe the special IF9483, MIF1739 and methods for them. Section 6 presents MIF1739. It contains all the putative optimal LJ clusters, tables 28-60 give in an efficient and short notation all the indices to build the initial clusters, tables 18-27 present the geometrical type, the initial and minimum LJ potential, and a measure of the adjustment necessary to transform from C_{n+1} to C_n, and tables 2-17 give the coordinates of MIF1739 in order to reproduce the numerical results presented here. In addition, this section includes novel figures of the difficult clusters inside of IF9483, and novel descriptions of some clusters. Finally, Section 7 presents my conclusions and future work.

2 Notation

$\mathbb{N}$ is the set of the natural numbers, $\mathbb{Q}$ is the set of the rational numbers, and $\mathbb{R}$ is the set of the real numbers.

A lattice, $\Omega = \{p_i\}_{i \in \mathrm{I}}$, $p_i \in \mathbb{R}^3 \forall i \in$I where I is a set of indexes (I=$\mathbb{R}$ or I=$\mathbb{N}$) is a set of points in a regular pattern in $\mathbb{R}^3$.

A cluster of size n is $C_n = \left\{p_{i_1}, p_{i_2}, ..., p_{i_n}\right\}$, $p_{i_j} \in \Omega$, $\forall j = 1, \ldots, n$.

$\overrightarrow{\cdot} : L \to \mathbb{R}^{3\cdot}$ means $\overrightarrow{\cdot}\,(C_n) = \overrightarrow{C}_n = \left(p_{i_1}, p_{i_2}, ..., p_{i_N}\right) \in \mathbb{R}^{3N}$, it is a vector representation of a cluster where $p_{i_l} = (x_{i_l}, y_{i_l}, z_{i_l})$ is mapped into cylindrical coordinates $(\rho_{i_l}, \alpha_{i_l}, \beta_{i_l})$, $\rho_{i_l} \in \mathbb{R}^+$, $\alpha_{i_l} \in [0, \pi]$ is zero on the semi-axes Y^+ and the $\theta_{i_l} \in [0, 2\pi]$. Then coordinates $p_{i_l} \leq p_{i_m}$, $l \leq m$ if $\rho_{i_l} \leq \rho_{i_n}$; or if $\rho_{i_l} = \rho_{i_n}$ and $\alpha_{i_l} \leq \alpha_{i_m}$; or if $\rho_{i_l} = \rho_{i_n}$, $\alpha_{i_l} = \alpha_{i_m}$, and $\beta_{i_l} \leq \beta_{i_m}$.

$\overrightarrow{C}_n$ is used as an element of the metric space $\mathbb{R}^{3n}$.

Let p_j, $p_k \in \mathbb{R}^3$ and $r_{j,k} = \sqrt{(x_j - x_k)^2 + (y_j - y_k)^2 + (z_j - z_k)^2}$. Some potential functions [16] are

Buckingham Potential (BU):

$$\mathrm{VBU}_{i,j} = \alpha_{i,,j} e^{\beta_{i,,j} r_{i,,j}} + \frac{\gamma_{i,,j}}{r_{i,,j}^6}$$

where $\alpha_{i,j}$, $\beta_{i,j}$, and $\gamma_{i,j}$ are parameters for the type of particles.

Kihara Potential (KI):

$$\mathrm{VKI}_{i,j} = 4\epsilon_0 \left[\left(\frac{1-\gamma}{r_{i,,j}/\sigma - \gamma} \right)^{12} + \left(\frac{1-\gamma}{r_{i,,j}/\sigma - \gamma} \right)^{6} \right]$$

where ϵ_0, σ, and γ are parameters for the type of particles.

Lennard-Jones potential (LJ):

$$\mathrm{VLJ}_{i,j} = V_{i,j} = 4\epsilon_0 \left[\left(\frac{\sigma_{i,j}}{r_{i,j}} \right)^{12} - \left(\frac{\sigma_{i,j}}{r_{i,j}} \right)^{6} \right]$$

where ϵ_0 and $\sigma_{i,j}$ are parameters for the type of particles. For the examples in this paper, $\epsilon_0 = \sigma_{i,j} = 1$.

Morse Potential (MO) [9] is

$$\mathrm{VMO}_{i,j} = \left(1 - e^{-\alpha(1 - r_{i,j})}\right)^2 - 1$$

where α is a parameter.

A pair potential can represented by

$$\mathrm{VXX}_{j,k} = EXX\left(\{p_j, p_k\}\right) = EXX(p_j, p_k) = EXX(r_{j,k})$$

where XX can be BU for Buckingham, KI for Kihara, LJ for Lennard-Jones, and MO for Morse Potentials.

The complete potential of a cluster is

$$\mathrm{EXX}\left(C_n\right) = \sum_{i=1}^{n-1} \sum_{j=i+1}^{n} \mathrm{VXX}_{j,k}$$

The Lennard-Jones Potential (LJ) is written also as

$$\mathrm{E}\left(C_n\right) = E\left(\overrightarrow{C}_n\right) = 4 \sum_{i=1}^{n-1} \sum_{j=i+1}^{n} \left(\frac{1}{r_{jk}^{12}} - \frac{1}{r_{jk}^{6}}\right)$$

when there is not confusion with the other potentials.

The conventions follows in the paper for the problems are:

SOC denotes the problem of search of optimal clusters.

SOCC denotes SOC solved in a continuous search space.

SOCD denotes SOC solved in a discrete search space. Here it is assumed that an appropriate discrete set or lattice of points in $\mathbb{R}^3$ exists.

SOC(n) denotes SOC for clusters of size n.

SOCC(n) denotes SOCC for clusters of size n.

SOCD(n) denotes SOCD for clusters of size n.

SOCYXX denotes one of the previous problems, where Y=C or Y=D, and XX is BU, KI, LJ, and MO Potentials.

SOCYXX(n) denotes one of the previous problems for clusters of size n.

For $n \in \mathbb{N}$, $n \geq 2$ SOCCXX(n) can be stated:

Given $A \subset \mathbb{R}^3$, look for $\overrightarrow{C}_n^* = (x_1, \ldots, x_n) \in \mathcal{A}^n$ such that $\mathrm{EXX}\left(\overrightarrow{C}_n^*\right) \leq \mathrm{EXX}(x), \forall x \in A^n$ where $A^n = A \times \cdots \times A$ (n times).

In similar way SOCDXX(n) can be stated:

Given a lattice $\Omega = \{p_i \mid p_i \in \mathbb{R}^3, i = 1, \ldots, N \; N \gg n, N \in \mathbb{N}\}$, find $\overrightarrow{C}_n^* = (p_{l_1}, \ldots, p_{l_n})$, such that $\mathrm{EXX}\left(\overrightarrow{C}_n^*\right) \leq \mathrm{EXX}\left(\overrightarrow{C}_{I^k}\right)$, $\forall I^k \subset \mathbb{N}$, $|I^k| = n$ where $|\cdot|$ is the number of elements of a set. This means $\mathrm{EXX}\left(\overrightarrow{C}_n^*\right)$ is less or equal than the potential of any other cluster of n points from Ω.

The function adjust is defined as Adj:$2^\Omega \times 2^\Omega \to \mathbb{N}$, $\mathrm{Adj}(C_n, C_m) = |(C_n \setminus C_m) \cup (C_m \setminus C_n)|$.

The function On is defined as On:$2^\Omega \times 2^\Omega \to \mathbb{N}$, $\mathrm{On}(C_n, C_m) = |C_m \setminus C_n|$.

The function Off is defined as Off:$2^\Omega \times 2^\Omega \to \mathbb{N}$, $\mathrm{Off}(C_n, C_m) = |C_n \setminus C_m|$.

It is easy to see that $\mathrm{Adj}(C_n, C_m) = \mathrm{On}(C_n, C_m) + \mathrm{Off}(C_n, C_m)$.

There are several references that explains how to build IC and FC [15, 30, 24], in particular Northby [17] called to the combination of both IF. Hereafter, ICn represent a subset of n points of type IC, and similarly for FC and IF.

$C_j \to C_j^*$ means $C_j^* = \min(C_j)$ under some potential function and where min is a minimization procedure. The results reported here were computed with a version the Conjugated Gradient Method (CGM). Also, in the text when there is not confusion C_j^* means the putative optimal LJ cluster.

In some figures the normalized gradient of LJ is depicted. This vector correspond to ∇ VXX (x^*) / $\|$ ∇ VXX (x^*) $\|$. The corresponding component of the gradient is drawn as a vector in $\mathbb{R}^3$ on each particle of a given cluster.

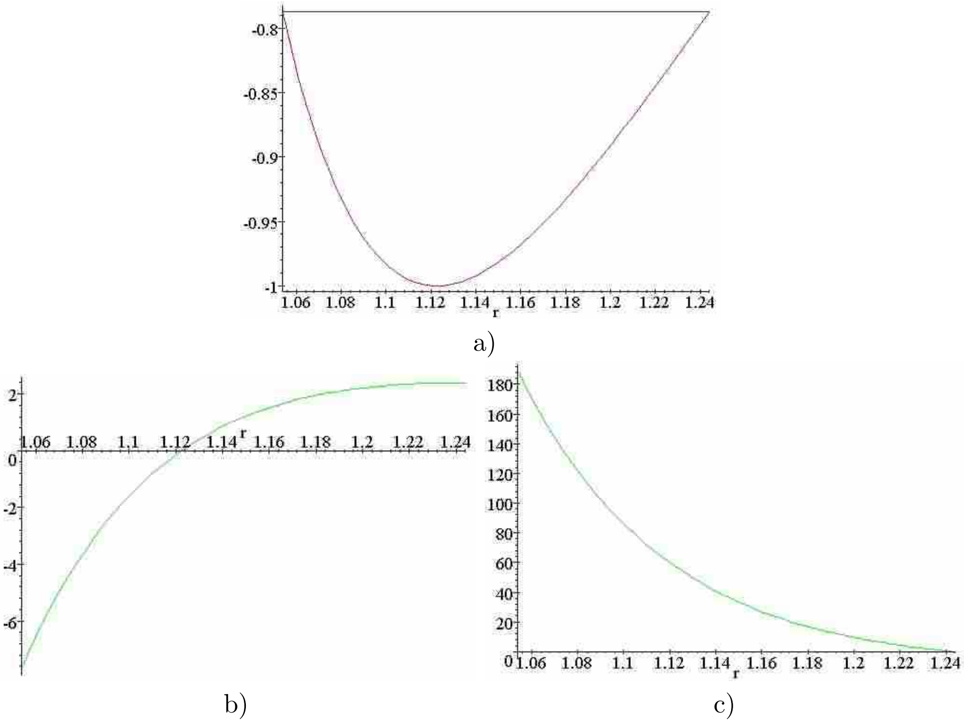
3 Properties of the LJ Potential

Note that LJ, BU, and KI but MO Potentials share the well potential's properties [18]:

1. $\lim_{r \to r_0} \mathrm{VXX}(r) = \infty$
2. Each cluster under a pair potential has a basin.

Moreover in one dimension, given two particles, the first is fixed on $(0, 0, 0)$, and the second with coordinates $(r, 0, 0)$ is free to move on axes X. The following properties are satisfied for E (similar results are given by Xue [32]):

1. $\mathrm{E}(r) = 4(\frac{1}{r^{12}} - \frac{1}{r^6})$.
2. $\mathrm{E}'(r) = 24\frac{-2+r^6}{r^{13}}$
3. $\mathrm{E}''(r) = -24\frac{-26+7r^6}{r^{14}}$
4. $\mathrm{E}(r) < 0$, $r > 1$, $\lim_{r \to \infty} \mathrm{E}(r) = 0$.
5. $r^* = \sqrt[6]{2}$, is the global minimum of E. $\mathrm{E}(r^*) = -1.0$, $\mathrm{E}'(r^*) = 0$ $\mathrm{E}''(r^*) > 0$
6. $\mathrm{E}(r^* + \xi) \approx -1 + O(\xi^2), 0 \leq |\xi| << 1$. By a series expansion $\mathrm{E}(r^* + \xi) = 4\left(\frac{1}{(\sqrt[6]{2}+\xi)^{12}} - \frac{1}{(\sqrt[6]{2}+\xi)^6}\right) = -1 + \left(18\left(\sqrt[3]{2}\right)^2\right)\xi^2 + O(\xi^3)$, with $0 \leq |\xi| << 1$, $\mathrm{E}\left(\sqrt[6]{2} + \xi\right) \approx -1 + K\xi^2, K = 18\left(\sqrt[3]{2}\right)^2$.



a) b) c)

Figure 1: a) E(r), b) E′(r), and c) E″(r).

7. The basin region of E is the interval $(1.053666\,8, 1.\,2444551)$. $\mathrm{E}''(r) > 0$, $\forall r \in (1.053666\,8, 1.\,2444551)$. Therefore E($r$) is convex and $\mathrm{E}(r) < -0.786\,982\,15$, $\forall r \in (1.053666\,8, 1.\,2444551)$.

Figure 1 depicts E(r), E′(r), and E″ (r) in $(1.053666\,8, 1.\,2444551)$.

4 Unified Lattice

This section explains what is the relationship between the discrete and continuous SOC. The main proposition is: Exist a discrete set for all optimal clusters where their potential has the same value as in the solution of the continuous search of optimal clusters. This type of potential function must fulfill the conditions of a well potential [18]:

1. Potential function creates a infinite repulsion force when distance between two particles goes to 0.
2. Each cluster under this potential has a basin.

Note that BU and LJ functions comply 1. KI function and MO function do not comply with 1.

Proposition 1. Exist a discrete set, Ω, where $\forall j \in N$, $j \geq 2$, the potential of SOCDXX(j) has the same optimal value of SOCCXX(j) for a potential function such that

1. $\lim_{r_{i,j}\to 0} \mathrm{VXX}\,(r_{i,j}) = \infty$.
2. $\nabla^2\mathrm{VXX}\,(x^*)$ semi-positive, $\|\nabla\mathrm{VXX}\,(x^*)\| \ll 1$ and $\frac{\|\nabla\mathrm{VXX}(x^*)\|}{|\mathrm{VXX}(x^*)|} < \delta_0$, where $0 < \delta_0 \ll 1$

where XX is BU or LJ.

Proof. Without lost of generality, I assume a continuous search for a cluster of size j in A=$\{p = (x, y, z) \in \mathbb{R}^3 \mid \|p\| \leq r\}$, a ball of ratio, r$\gg$ 0 from where $\vec{\cdot}$:A$\to \mathbb{R}^{3j}$. The continuous search can be stated as generate

k random vectors $\left\{\overrightarrow{C}_j^l\right\}_{l=1,\ldots,k}$ with coordinates in A and using a minimization routine to compute $\overrightarrow{C}_j^{®l} = (x_{l_1}, x_{l_2}, \ldots, x_{l_N})$ such that the property 2 is fulfill. Then select $x^* = \overrightarrow{C}_j^* = \min_{l=1,\ldots,k}\left\{\overrightarrow{C}_j^{®l}\right\} = (x_1^*, \ldots, x_j^*)$. Repeating this procedure, A is exhaustively explored, therefore this must provide a solution of SOCCXX(j). This means, $\mathrm{EXX}(x^*) \leq \mathrm{EXX}(x), \forall x = (p_1, \ldots, p_j) \in \mathbb{R}^{3N}$, $p_l \in A$, $l = 1, \ldots, j$.

The first property does not allow to have $p_m = p_n$ with $m \neq n$. Therefore, p_i, $i = 1, \ldots, j$ are separate points in A$\subset \mathbb{R}^3$. Moreover, we can translate and set $x_1 = (0,0,0)$ without changing the value of EXX. Therefore $\exists\varepsilon_0 > 0$ for solving SOCCXX(j) and there is not need of the points, $p \in \mathbb{R}^3$ such that $\|p\| < \varepsilon_0$ because they are never going to participate by the condition 1.

For other coordinates of x^*, the second property provides a basin or convexity region around it. A Taylor series for a potential function around of $x^* \in \mathbb{R}^{3j}$ for a direction $d \in \mathbb{R}^{3j}$ with $0 < \varepsilon \ll 1$ is

$$\mathrm{VXX}\left(x^* + \varepsilon d\right) = \mathrm{VXX}\left(x^*\right) + \varepsilon d \cdot \nabla \mathrm{VXX}\left(x^*\right) + \frac{1}{2}\varepsilon^2 d \cdot \nabla^2 \mathrm{VXX}\left(x^*\right) \cdot d + O\left(\varepsilon^3\right).$$

By the convexity, $\frac{1}{2}\varepsilon^2 d \cdot \nabla^2 V\left(x^*\right) \cdot d \geq 0$. Therefore

$$\left|\mathrm{VXX}\left(x^* + \varepsilon d\right) - \mathrm{VXX}\left(x^*\right)\right| \leq |\varepsilon|\,\|d\|\,\left\|\nabla \mathrm{VXX}\left(x^*\right)\right\|,$$

$$\frac{\left|\mathrm{VXX}\left(x^* + \varepsilon d\right) - \mathrm{VXX}\left(x^*\right)\right|}{\left|\mathrm{VXX}\left(x^*\right)\right|} \leq |\varepsilon \delta_0|.$$

This property allows to select a truncated representation of x^* for some $\varepsilon_1 = \varepsilon\delta_0 > 0$. Therefore, $x = (p_1, \ldots, p_j) \in \mathbb{R}^{3j}$ such that $\|x - x^*\| < \varepsilon_1$ and $\|p_l - p_l^*\| < \varepsilon_0$ $l = 1, \ldots, j$ are not necessary to consider because they are never going to improve the potential of x^*. Let $\varepsilon_j = \min\{\varepsilon_0, \varepsilon_1\}$.

Finally, $\Omega^o = \cup_{j=2}^{\infty} C_j^*$ for $\varepsilon^* = \min\{\varepsilon_j\}_{j=2}^{\infty}$ and by the construction of Ω^o it follows immediately that SOCDXX(j) and SOCCXX(j) have the same solution $\forall j \in \mathbb{N}$, $j \geq 2$. ∎

Remark 1. In the previous proposition, A is a subset of $\mathbb{R}$. A has the cardinality of $\mathbb{R}$ but the proposition states that a discrete set of points of A is sufficient in order to have the same solution between SOCDXX(j) and SOCCXX(j) where XX is BU or LJ.

Proposition 2. The set Ω^l=$\{p_{i_j} \in C_j^k \mid C_j^k$ is a local optimal cluster, such that $C_j^k = \{p_{i_j}\}$, $i_j \in I^k$, $|I^k| = j\}$ under a well potential function (a potential that fulfill the properties of the Proposition 1) is numerable.

Proof. Let assume that the $\cup_{j=1,\ldots,N,|I^k|=j} C_j^k$, is not numerable. This means $\exists K_j = \cup_{|I^k|=j} I^k$ is not numerable. From the previous proposition, clusters can be created from the continuous search depicted in the previous proposition, therefore each one fulfill properties 1) and 2) and we add the coordinates of each C_j founded to some Ω. Then for j, $\exists\varepsilon_j$ such that $\overrightarrow{C}_j^m, \overrightarrow{C}_j^n \in \mathbb{R}^{3j}$ and $\overrightarrow{C}_j^m \neq \overrightarrow{C}_j^n$ for $\forall m \neq n$, $m, n \in K_j$. But each $\overrightarrow{C}_j^m$ can be approximated $\underline{\overrightarrow{C}}_j^m \in \mathbb{Q}^{3j}$ if $\left\|\underline{\overrightarrow{C}}_j^m - \overrightarrow{C}_j^m\right\| < \varepsilon_j$ $\forall m \in K_j$, which imply that $\cup_{m\in K_j} \underline{C}_j^m \subset \mathbb{Q}^3$ is not numerable! ∎

Proposition 3. The set Ω^o=$\{p \in C_j^* \mid C_j^*$is the global optimal cluster $\forall\ j \in \mathbb{N}\}$ is numerable.

Proof. Ω^o is the union of finite set of points, therefore is numerable. ∎

Proposition 4. The set Ω^b=$\{p \in C_j^{k'} \mid C_j^{k'}$ is a cluster in a basin for the optimal local clusters C_j^k of size j, $\forall\ j \in \mathbb{N}\}$ is not numerable.

Proof. Given an optimal local cluster C_j^k by the condition 2 of Proposition 1, $\exists\delta_0 > 0$ and $d \in \mathbb{R}^{3j}$ such that $\forall$ $0 \leq \delta \leq \delta_0$ $\overrightarrow{C}_j^{k\delta} = \overrightarrow{C}_j^k + \delta d$, then $\overrightarrow{C}_j^{k\delta} \to C_j^k$, $\forall\ 0 \leq \delta \leq \delta_0$. Therefore, Ω^b is union of non-numerable sets for each optimal local cluster. ∎

Proposition 5. Exist a set, Ω^* such that $\exists\ C_k^{'} \in \Omega^*$, $C_k^{'} \to C_k^* \in \Omega^o$ $\forall k \geq 2$.

Proof. The results follows from $\Omega^b \bigcap \mathbb{Q}^3 \neq \emptyset$. ∎

Remark 2. The last proposition states that Ω^*=$\Omega^b \bigcap \mathbb{Q}^3$ is one trivial set where $\exists\ C_j$, such that $C_j \to C_j^*$, $\forall j \geq 2$. In order to find IF, I add each putative optimal LJ cluster, C_j^*, j=2,. . .,1000. It was a surprise that taking C_{13}^* and adjusting the other putative optimal LJ clusters to it, the IF structure show up naturally.

The next proposition states that is not possible to find a function from $\mathbb{N}$ to Ω capable to give all optimal clusters. Hereafter, Ω is a numerable set and could be Ω^l or Ω^*.

Proposition 6. $\nexists s : \mathbb{N} \to \Omega$, $s(j) = C_j = \left\{x_{i_1}, \ldots, x_{i_j}\right\}$, $x_{i_k} \in \Omega\ \forall k = 1, \ldots, j$ such that $s(j) = C_j^*, \forall j \in \mathbb{N}$.

Proof. The proof is based in building a Cantor's Diagonal schema. Suppose that such selection function, s, exists for some order in Ω, which is numerable. Then changing the first particle in Ω that belong to the C_2^* for any other different and far way from this one, the new order Ω_2 is an order where s can not give C_2^*. This procedure is repeated for C_k^*, $k = 3, \ldots, \infty$ giving Ω_k, $k = 3, \ldots, \infty$ where s can not give C_k^*. The set of points that belong to the diagonal differs from all the enumerations Ω_k, $k = 2, \ldots \infty$ which are all the possible enumerations of Ω! ∎

Proposition 7. It is not possible to find an algorithm with polynomial complexity to solve SOCD(j), $\forall j \in \mathbb{N}$.

Proof. If such algorithm exist, it means that it is possible to find $M \in \mathbb{N}$, $M > 0$, $T(j) \leq O\left(j^M\right) \forall j \in \mathbb{N}$ where T is the time to take this algorithm to find C_j^*. But this means that such algorithm is the function s of the previous proposition! ∎

Remark 3. The last proposition states that it is not possible to build a selection function in computational time for finding all the optimal clusters from $j \geq 2$, $j \in \mathbb{N}$. In particular, it states that the complexity of finding all the optimal clusters from $j = 2, \ldots, \infty$ cannot be derived from some arbitrary inhered order of Ω (numerable).

One of the reason of the success of the methods for SOCCXX(j) and SOCDXX(j) is the combination of different lattices, which are subsets of Ω^*. Moreover, from the cardinality point of view, Ω^* is a smaller set than $\mathbb{R}^3$, and it seems to be the right search space to explore the complexity of the NP problem SOCDXX(j), $\forall j \geq 2$.

The Proposition 1 permits to build a discrete set of points after the solution of the SOCDXX(j), $\forall j \geq 2$ and also proofs that exist a set where SOCC and SOCD have the same solution, therefore SOCC is not efficient way for SOC.

It was not easy to build a set of points as a discrete lattice from basin regions for solving SOCDLJ(j), $\forall j \geq 2$ for the putative optimal clusters, i.e., a set of points in $\mathbb{R}^3$ with a regular structure. However, combining IC and FC with an appropriate separation was the surprising answer. Section 6 presents numerical experiment of the propositions of this section. Particularly, for SOCDLJ(j) a lattice and a set, IF9483 and MIF1739, are presented with the property, $\exists C_j \to C_j^*$, $j = 2, \ldots, 1000$ in the sense that ELJ(C_j^*) are the putative optimal potential LJ values from [26] or better ones.

4.1 Symmetry reduces the Complexity of Potential's Evaluation

For SOC, the symmetry inhered from a lattice Ω^* can reduce the number of operations to evaluate a potential function. A simple example, taking Ω^*= IF and C_{13} as a centered icosahedron inside of a ball of ratio, $r^* = \sqrt[6]{2}$. Here, without lost of generality the points of $C_{13} = \{p_1, \ldots, p_{13}\}$ are:
p_1 = (0.000000000000, 0.000000000000, 0.000000000000),
p_2 = (0.000000000000, 1.081838288553, 0.000000000000),
p_3 = (0.967625581547, 0.483812790773, 0.000000000000),
p_4 = (0.299012748890, 0.483812790773, -0.920266614664),
p_5 = (-0.782825539663, 0.483812790773, -0.568756046574),
p_6 = (5,-0.782825539663, 0.483812790773, 0.568756046574),
p_7 = (0.299012748890, 0.483812790773, 0.920266614664),
p_8 = (0.782825539663, -0.483812790773, -0.568756046574),
p_9 = (-0.299012748890, -0.483812790773, -0.920266614664),
p_{10} = (-0.967625581547, -0.483812790773, 0.000000000000),
p_{11} = (-0.299012748890, -0.483812790773, 0.920266614664),
p_{12} = (0.782825539663, -0.483812790773, 0.568756046574), and
p_{13} = (0.000000000000, -1.081838288553, 0.000000000000).

Then by the symmetry on these points, EXX(C_{13}) =12VXX$_{1,2}$+30VXX$_{2,3}$+ 30VXX$_{2,8}$+ 6VXX$_{2,13}$

which requires five points $\{p_1,\ p_2,\ p_3,\ p_8,\ p_{13}\}$ and the four factors VXX$_{1,2}$, VXX$_{2,3}$, VXX$_{2,8}$, and VXX$_{2,13}$ for any potential function. But without symmetry, EXX(C_{13}) = $\sum_{i=0}^{n-1}\sum_{j=i+1}^{13}$ VXXi, j needs thirteen points and $13(13+1)/2 = 91$ factors VXX$_{i,j}$. In particular for this cluster ELJ(C_{13}) = -44.326801 = ELJ(C_{13}^*).

5 Methods for IF

There are several references that explains how to build IC and FC [13, 15, 24, 30]. I build an IF for the Lennard-Jones Potential using the propositions of the previous section. The first approach was to use Proposition 1 to build a set from the C_j^*, $j = 2, \ldots, 1000$ by adding in growing order the points of each C_j^* but after few numerical experiments, a fixed combination of an IC and an FC together with an step ratio, $r^* = 1.08183839$, between shells makes possible to build an IF such that $\exists C_j \rightarrow C_j^*$ using a minimization procedure based on the CGM. The possibility to find a lattice was predicted by Proposition 5. The value r^* correspond to the icosahedron described in section 4.1. In addition, this is the only cluster where SOCDLJ(13) does not need a relaxation, moreover, ELJ(C_{13}) = $ELJ(C_{13}^*)$. Note that the particular order of the sequence of points is very important to reproduce the putative optimal LJ clusters, therefore tables 2-17 give all the coordinates of MIF1739.

Give the result in IF9483 is lengthy but with MIF1739 is a short way to present it. Meanwhile MIF1739 contains only 1739 points, the complete IF with the same property needs 9443 points. The number of points of the IF9483 comes from sum of the magic numbers of the particles of the complete shells IC and FC for the shells 0 to 11. Figure 2 depicts IF75, IF509, and IF9483. Figure 3 depicts MIF1739 alone and inside of an IF9483.

The construction of the MIF1739 is done by the following algorithm:

1: $C_{1000}^{'}$ is a rotation of C_{1000} to set as many particles as possible of the last shell over the semi-axes Y^+.
2: for j=999, 2
3: $\quad C_j' = \text{minAdj}\left(C_{j+1}^{'}, C_j\right)$ over all rotations of C_j based on the symmetry of the centered icosahedron in IF.
4: end for
5: MIF=$\cup_{j=2,\ldots,1000} C_j'$

Remark 4. In the step 3, for the clusters that are not centered IC or FC as the C_{38}^*, C_{98}^* and the Ino's decahedrons the rotation are five and they are around of the axes Y. In addition, these clusters exist on infinity positions of an infinite IF, therefore they were manually translated to closed position toward the center of IF and over the semi-axes Y^+.

The tables 28-60 allow to build all the C_j^* from MIF1739. The algorithm is

1: C_{1000}=$\{p_i \in$ MIF1739 $\mid i$ is in the column On in tables 28-60 for $C_{1000}\}$.
2: $C_{1000}^* = \min(C_{1000})$.
3: for j=999 to 2
4: $\quad C_j$=$C_{j+1} \setminus \{p_i \in$MIF1739 $\mid i$ is in the column Off in tables 28-60 for $C_j\} \cup \{p_i \in$MIF $\mid i$ is in the column On in tables 28-60 for $C_j\} \cup \{p_i \in$MIF $\mid i$ is in the column On in tables 28-60 for $C_j\}$
5: $\quad C_j^* = \min(C_j)$.
6: end for.

The tables 18-27 give the type of the putative optimal LJ clusters in IF as: 1=IC, 2=Ino's decahedron (ID), 3= truncated octahedron (TO), and 5=FC; the initial, optimal and difference of LJ, and the value of Adj$\left(C_{j+1}^{'}, C_j\right)$.

The classification of cluster is done automatically by identified the particles of a cluster with the type of particles of MIF1739, type is IC when all the particles of a cluster are only IC around the center of IF, type is ID if there is a particle in the cluster close to the center of mass of the cluster, such that it is on the semi-axes Y^+, type is TO when all particles are IC and they are inside of a tetrahedron formed by three internal axis of the IF, type is FC when at least one particle of the cluster is FC.

5.1 Methods for search in IF

The classification of the algorithms for SOC has many different approaches [27]. Here tree classes are depicted on a scale from comparisons versus properties (necessary and sufficient conditions of a problem):

Exhaustive Algorithm It explores a search space of a problem verifying that the global optimum is founded. Here, for the comparisons an objective function is used to provide the way to determine the optimum. For small discrete and continuous problems, the algorithm's complexity is not an issue. There are many global optimization methods that work fine for low dimension problems. By example, the classical Grid Method divides the search space in small boxes. Therefore, it can locate the global minimum by an exhaustive search. Generally, the complexity grows rapidly, exponentially and for the NP problems, there is not hope that exist a polynomial complexity algorithm.

Scout Algorithm It is a fact widely accepted that using previous knowledge and natural (Physical, Chemical, Thermodynamical, Biological, Medical, and so on) understanding of the process and phenomena involved in a problem will help to design an efficient method. Here, some authors argue about how much and what type of knowledge could be used. Other authors apply the rule: "Achievements kill doubt". From a practical point of view, this category contains algorithms that can use all or a part of whatever is available. Most of the methods for clusters optimization belong to this category. A method in this category could find a novel solution without a guarantee of optimality. Most of the justifications for algorithm's efficiency are done by numerical experiments on a set of problems (benchmark). This type of analysis depends on the researcher and his/her particular computers and working conditions. Therefore, a claim that SOC can be done in polynomial time $O(n^3)$ is a very strong statement. If this could be extended and proved then the NP problems will be class P! Exploring IF is like a travel in one axes of the IF towards axes Y^+. MIF1739 is also the minimum region to explore without to many repetitions caused by the icosahedral symmetry.

Wizard Algorithm There are problems where necessary and sufficient optimal conditions can be established for the solution. Generally these methods are efficient and they do not need to do exhaustive comparisons. By example, an optimization problem with a convex function can be efficiently solved by the Conjugate Gradient method or by the large family of Newton and Quasi-Newton methods.

In [1] the Peeling Method was presented. This method is similar to the algorithm 4.1 of Maier *et al.* [15]. It executes a greedy strategy to set Off the particles on the outer shell of a cluster and to set On particles inside of a lattice that are neighbor of the previous ones. In this way, an small change is done and a minimization routine computes the potential of this cluster. The Modified Peeling Method has three basic operations: forward, backward, itself. Moreover, the basic idea is to adjust a cluster by turning on a neighbor particle and turning Off a particle in the outer shell of a cluster or the centered particle. The complexity of each operation is $O(\mathrm{n}^3)$ for a forward (C_n to C_{n+1}) and backward (C_n toC_{n-1}), and $O(\mathrm{n}^4)$ for itself. These operations are quite similar to the proposed pivot algorithm [31], reverse greedy operator by Leary [13], the "final repair" step of Hartke [8], Fusion Process by adding one particle to C_n of Solov'yov *et al.* [24], and the greedy search method [29] but the novelty is that in right search space this Modified Peeling Method is capable to find new solutions or reproduce the existent ones.

Given $C_n = \{p_{i_1}, p_{i_2}, ..., p_{i_n}\}$, $p_{i_j} \in$ IF, $\forall j = 1, \dots, n$, computes the sets:

$K_C = \{\ i_k \mid i_k$ such that $\exists p_{i_k} \in C_n$, $\exists p_{i_l} \in$ IF $\setminus C_n$, where p_{i_k} and p_{i_l} are neighbors or $i_l = 0$ (centered particle of C_n)$\}$.

$K_{\mathrm{IF}} = \{i_l \mid i_l$ such that $\exists p_{i_k} \in C_n$, $p_{i_l} \in$ IF $\setminus C_n$, where p_{i_k} and p_{i_l} are neighbors$\}$.

The Modified Peeling Method executes this three operations:

forward: $C^*_{n+1} = \min_{\text{set On } j\in K_{\mathrm{IF}}} \{\ p_j\ \} \bigcup C_n\ \}$.

backward: $C^*_{n-1} = \min_{\text{set Off } k\in K_C} C_n \setminus \{p_k\ \}$.

itself: $C^*_{n} = \min_{\text{set Off } k\in K_C,\text{ set On } j\in K_{\mathrm{IF}}} C_n \setminus \{p_k\ \} \bigcup \{\ p_j\ \}$.

Remark 5. These operations do not guarantee global optimality.

For SOCD, it seems that a wise algorithm only could exist after founded the optimal clusters. One of the reason is that the global optimality is an open question for clusters with more than five particles [27]. The efficient method after founded the optimal cluster is a telephone directory method. This type of method uses a table with the data needed. The only operation is retrieving an entry of the table by an index, i.e., given the indexed table $(t[1], \dots, t[K])$, $K \in \mathbb{N}$, $K > 0$ and $j \in [1, K]$ then retrieve $t[j]$.

Proposition 8. The telephone directory method in Ω^o (see Proposition 2) has complexity $O(1)$.

Proof. Here, the only operation is to select the points of Ω^o from a table with the collection of the indexes of each optimal cluster. Therefore the complexity is only one operation. ∎

Remark 6. Ω^o is not symmetric because the PES of small clusters. If the function s of the Proposition 6 exists, its complexity would be one!

Proposition 9. The telephone directory method on Ω^*, and particularly on IF has complexity $O(n^3)$.

Proof. This limit comes from the complexity of the relaxation multiplying by the complexity of the evaluation of a pair potential function for n particles. It is well know that the a minimization method as the CGM converges in at most the number of variables of the problem, which in this case is $3n$ and the worst case for evaluation of the potential is $O(n^2)$. ∎

For space consideration, a table of the optimal clusters for a telephone directory method is not given. However, this table can be obtained from the tables 28-60. The algorithm for the telephone directory method on this table is:

1: C_n={ $p_i \in$ MIF1739 | i is in the column On in the telephone table of optimal clusters }.
2: $C_n^* = \min(C_n)$.

Remark 7. The telephone directory method with MIF1739 or IF9483 has polynomial complexity $O(n^3)$ for SOCD(n). An estimation of complexity less than $O(n^3)$ by other authors is probably biased by the particular data and environment of their numerical experiments. It is possible that this small difference was influenced by the data over the number of iterative steps of the relaxation or minimization procedure on a very good initial population of clusters, which is highly possible if an algorithm gets initial random clusters from IC, ID, and FC lattices.

The results presented in the next Section show that optimal clusters are not always around on the same localization in IF. Therefore exploring IF by Exhaustive Algorithms is hard and it has exponential complexity caused by the combinations of possible particles.

Proposition 10. The function Adj is not bounded.

Proof. Let assume that $\exists M > 0$ such that $\text{Adj}(C_n, C_m) < M \; \forall n, m \geq 2$. This means that for $m \gg M$ because the number of adjust is bounded, the complexity of founding SOCD(m) from SOCD($m-1$) or from SOCD($m+1$) is $O(m^2)$ which imply the existence of the function s of Proposition 6. ∎

Remark 8. Also, if Adj is bounded, the complexity of a telephone directory method in an sufficient large appropriate lattice IF or set Ω^l (see Proposition 2) is greater than $O(m^2)$, the complexity of SOCD(m) for large clusters, which is also impossible, moreover then SOCD is not NP!

Adding previous knowledge to build an scout algorithm is seemed to be the way to address SOCD, and the complexity can be decreased by symmetry. However, it easy to see that exists a cluster where symmetry cannot reduce the worst case of the complete pair potential's evaluation for some clusters, which is $O(n^2)$. Finally, by the Proposition 9, $O(n^3)$ is a lower limit of the complexity of SOCD(n) in IF.

6 Results

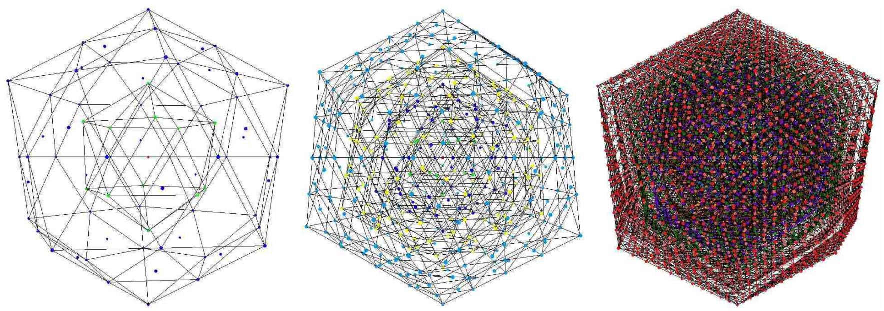
MIF1739 is a discrete lattice for LJ where $\exists \, C_n$, such that $C_n^* = \min(C_n)$ under LJ and C_n^* is the putative optimal cluster for $n = 2, \ldots, 1000$. I took the data from CCD [26] to verify that my results. Data for C_n^* $n = 148, \ldots, 309$ came from Romero, Barrón, and Gómez [20] and data for C_n^*, $n = 310, \ldots, 1000$ came from the recently results of Shao *et al.* [30, 29]. I was able to repeat and even improve some of the putative optimal LJ clusters. From this comparison new putative optimal LJ clusters are C_{537}^*, C_{542}^*, C_{543}^*, C_{546}^*, C_{547}^*, C_{548}^*, C_{664}^*, and C_{813}^*. The particular interest are the C_{542}^*, C_{543}^*, C_{546}^*, C_{547}^*, and C_{548}^* because to my knowledge they are first optimal LJ clusters type IC with central vacancy (CV) reported in the shell 310-561. The prediction of CV was stated in [22] for the next shell, 562-923. Table 1 summarizes these new results.

What is easy to accept from our classification is that a cluster type ID is contained on any of the twelve axis of symmetry of IF (here the clusters type ID are on the semi-axes Y$^+$), a cluster type TO is in a centered tetrahedron formed by the center and three axis of symmetry forming four triangular faces. One controversial result of this automatic classification is the cluster's type for C_{98}^*, moreover, this is the only cluster in MIF1739 where the adjacency matrix [9] is not the same between C_{98} and C_{98}^*, however, $C_{98}^* = \min(C_{98})$. The right type of C_{98}^* is tetrahedral (depicted by Leary [14]). The different type reported here comes from the distance between C_{98} and C_{98}^* but it is a fact that the basin around C_{98}^* attracts this C_{98} of type FC. Figures 8 and 9 depict novel views of C_{98} and C_{98}^*.

Figure 7 a) depicts C_{664} inside of IF9483 and b) depicts C_{664}^* as ID.

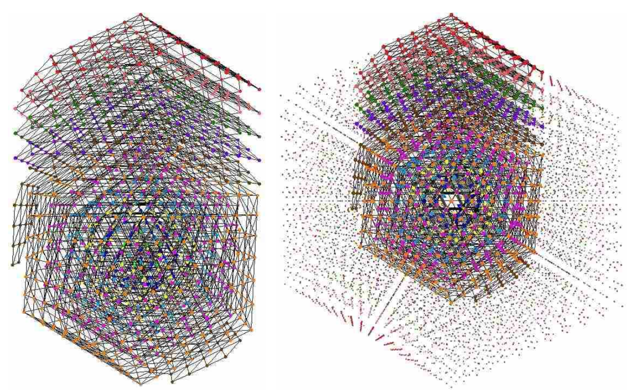
n	$E^{\text{new}*}$	$E^{\text{old}*}$	$E^{\text{new}*} - E^{\text{old}*}$	T
537	-3659.52825	-3659.70629	-0.17804	1
542	-3698.95403	-3699.22727	-0.27324	1/CV
543	-3706.94784	-3708.21090	-1.26306	1/CV
546	-3730.50408	-3730.69222	-0.18814	1/CV
547	-3738.38788	-3738.68065	-0.29277	1/CV
548	-3746.37071	-3747.67942	-1.30871	1/CV
664	-4596.1978	-4596.1971	-0.0007	2
813	-5712.2517	-5712.2506	-0.0011	1

Table 1: Novel C_n^*.



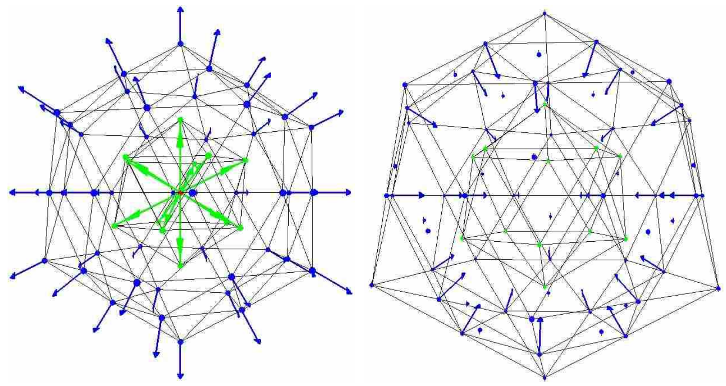
a) b) c)

Figure 2: a) IF75, b) IF509, and c) IF9483, where IF = IC$\bigcup$FC.



a) b)

Figure 3: a) MIF1739 and b) MIF1739 inside of IF9483. MIF1739 and IF9483 contain C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$.



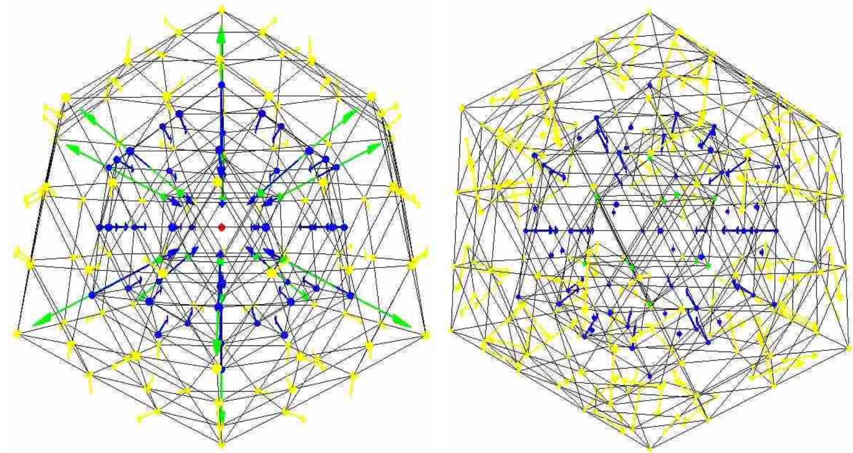
a) b)

Figure 4: a) C^*_{55}=IC55* and b) IF75 with gradient.

Wales and Doye [25] have been used basin for search of optimal LJ clusters and get through the barrier of the PES caused be the deformation of the particles on the surface. Figure 6 b) gives another perspective of this. Because, C^*_{37} and C^*_{39} are close to the center of IF, C^*_{38} is a jump from the center of IF to the first truncated octahedron in one of the tetrahedron formed by three axes of symmetry of IF. From table 60, the indices of the particles for these three clusters show that they do not share any particle. This is the unique case in the results where there is not intersection between three consecutive clusters. Figure 6 a) depicts C^*_{38} with gradient, where $\|\nabla \text{VXX}\,(x^*)\| \sim 3.7{\cdot}10^{-6}$. The gradient looks big by the normalization. The gradient of C^*_{38} shows that this cluster is stable and elastic in the sense that it can be deformed by $\alpha\nabla\text{VXX}\,(x^*)$ for some small values of α and with a minimization routine, the deformed C_{38} will return to C^*_{38}. The gradient of the thirty-two particles in the outer shell point toward the center and the six particles of the inner octahedron shell point towards the square faces of the outer shell making this cluster stable to twisting deformations.

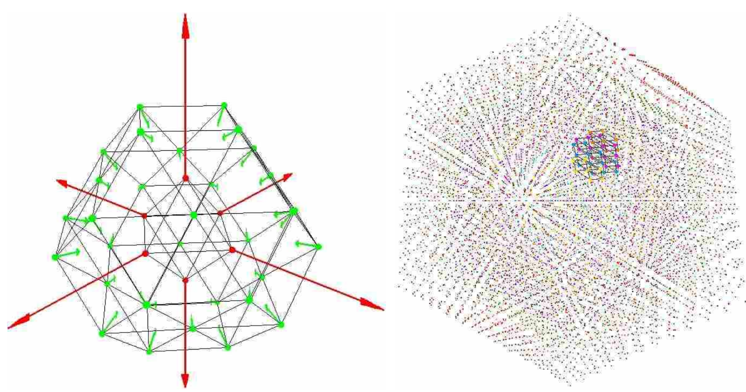
Figure 4 a) depicts C^*_{55} with gradient. Here the gradient shows that the particles on the top of the outer shell can move to close positions around the semi-axes Y^+, in similar way for the bottom. The gradient of the particles in the inner icosahedron points in diametrical directions and if this effect is combined with an incomplete outer shell is possible to have great displacement of particles from their positions on IF and, also, a possible twisting and shrinking on the top or bottom cap of a cluster. Similar results can be seen from the gradient of C^*_{147} depicted in figure 5 a).

The graphical representation of the gradient helped to design IF. Our selection of the shell's step size is to have the corresponding component of the gradient for the particles IC and FC pointed towards $(0, 0, 0)$. Figures 4 b) and 5 b) depicted IF75 and IF227 with their gradient.



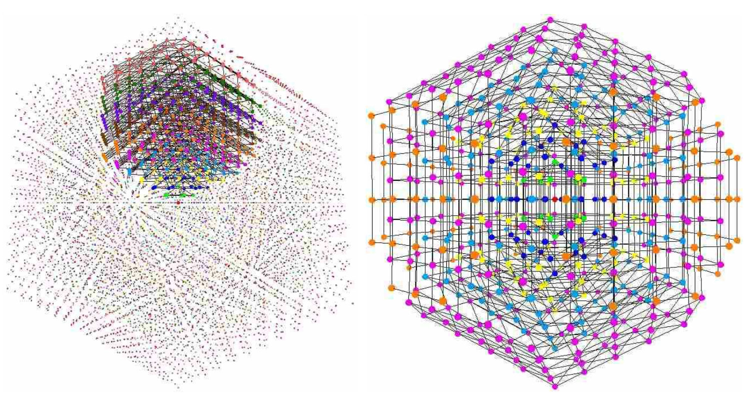
a) b)

Figure 5: a) C_1^*47=IC147* and b) IF227 with gradient.



a) b)

Figure 6: a) C_{38}^* with gradient and b) C_{38} inside of IF9483.



a) b)

Figure 7: a) C_{664} inside of IF9483 and b) C_{664}^*.

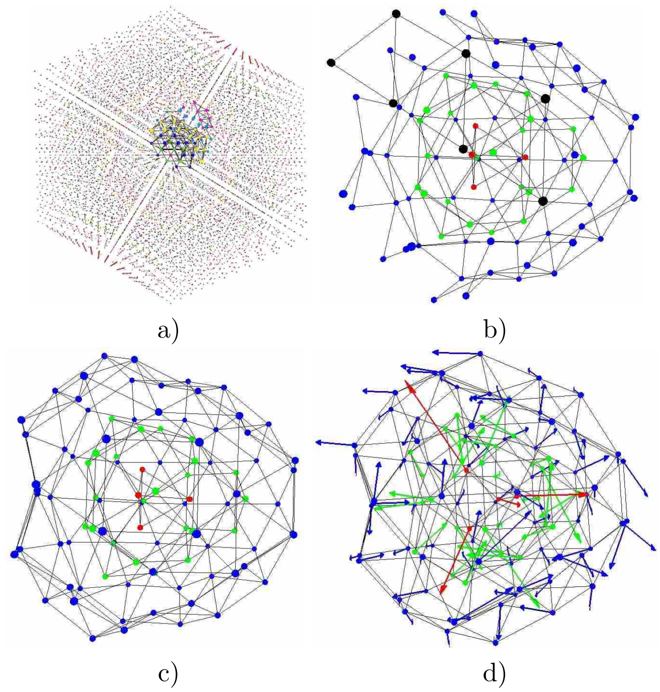


Figure 8: a) C_{98} inside of IF9483, b) C_{98}, c) C_{98}^{*}, and d) C_{98}^{*} with gradient.

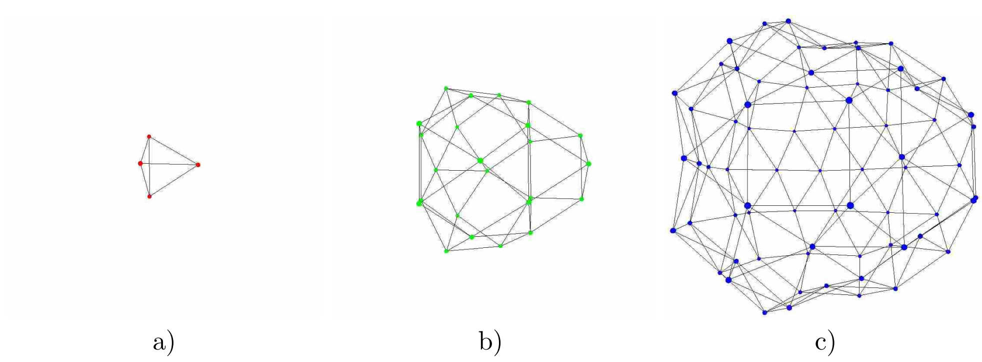


Figure 9: Novel views of tetrahedral shells of C_{98}^{*} a) interior shell with 4 particles, b) medium shell with 24, and c) outer shell with 70 particles.

#	i_p	X	Y	Z
1	1	0.00000000	0.00000000	0.00000000
2	2	0.00000000	1.08183839	0.00000000
3	3	0.96762567	0.48381284	0.00000000
4	4	0.29901278	0.48381284	−0.92026670
5	5	−0.78282561	0.48381284	−0.56875610
6	6	−0.78282561	0.48381284	0.56875610
7	7	0.29901278	0.48381284	0.92026670
8	8	0.78282561	−0.48381284	−0.56875610
9	9	−0.29901278	−0.48381284	−0.92026670
10	10	−0.96762567	−0.48381284	0.00000000
11	11	−0.29901278	−0.48381284	0.92026670
12	12	0.78282561	−0.48381284	0.56875610
13	13	0.00000000	−1.08183839	0.00000000
14	14	0.00000000	2.16367678	0.00000000
15	15	0.96762567	1.56565123	0.00000000
16	16	0.29901278	1.56565123	−0.92026670
17	17	−0.78282561	1.56565123	−0.56875610
18	18	−0.78282561	1.56565123	0.56875610
19	19	0.29901278	1.56565123	0.92026670
20	20	1.93525134	0.96762567	0.00000000
21	21	1.26663845	0.96762567	−0.92026670
22	22	0.59802555	0.96762567	−1.84053340
23	23	−0.48381284	0.96762567	−1.48902280
24	24	−1.56565123	0.96762567	−1.13751220
25	25	−1.56565123	0.96762567	0.00000000
26	26	−1.56565123	0.96762567	1.13751220
27	27	−0.48381284	0.96762567	1.48902280
28	28	0.59802555	0.96762567	1.84053340
29	29	1.26663845	0.96762567	0.92026670
30	30	1.75045129	0.00000000	−0.56875610
31	31	1.08183839	0.00000000	−1.48902280
32	32	0.00000000	0.00000000	−1.84053340
33	33	−1.08183839	0.00000000	−1.48902280
34	34	−1.75045129	0.00000000	−0.56875610
35	35	−1.75045129	0.00000000	0.56875610
36	36	−1.08183839	0.00000000	1.48902280
37	37	0.00000000	0.00000000	1.84053340
38	38	1.08183839	0.00000000	1.48902280
39	39	1.75045129	0.00000000	0.56875610
40	40	1.56565123	−0.96762567	−1.13751220
41	41	0.48381284	−0.96762567	−1.48902280
42	42	−0.59802555	−0.96762567	−1.84053340
43	43	−1.26663845	−0.96762567	−0.92026670
44	44	−1.93525134	−0.96762567	0.00000000
45	45	−1.26663845	−0.96762567	0.92026670
46	46	−0.59802555	−0.96762567	1.84053340
47	47	0.48381284	−0.96762567	1.48902280
48	48	1.56565123	−0.96762567	1.13751220
49	49	1.56565123	−0.96762567	0.00000000
50	50	0.78282561	−1.56565123	−0.56875610
51	51	−0.29901278	−1.56565123	−0.92026670
52	52	−0.96762567	−1.56565123	0.00000000
53	53	−0.29901278	−1.56565123	0.92026670
54	54	0.78282561	−1.56565123	0.56875610
55	55	0.00000000	−2.16367678	0.00000000

#	i_p	X	Y	Z
56	56	0.84442563	1.36630937	−0.61351113
57	57	1.36630937	0.32254189	−0.99268187
58	58	1.68885127	−0.32254189	0.00000000
59	59	1.04376748	−1.36630937	0.00000000
60	60	−0.32254189	1.36630937	−0.99268187
61	61	−0.52188374	0.32254189	−1.60619300
62	62	0.52188374	−0.32254189	−1.60619300
63	63	0.32254189	−1.36630937	−0.99268187
64	66	−1.36630937	−0.32254189	−0.99268187
65	67	−0.84442563	−1.36630937	−0.61351113
66	68	−0.32254189	1.36630937	0.99268187
67	72	0.84442563	1.36630937	0.61351113
68	73	1.36630937	0.32254189	0.99268187
69	74	0.52188374	−0.32254189	1.60619300
70	75	0.32254189	−1.36630937	0.99268187
71	76	0.00000000	3.24551517	0.00000000
72	77	0.96762567	2.64748962	0.00000000
73	78	0.29901278	2.64748962	−0.92026670
74	79	−0.78282561	2.64748962	−0.56875610
75	80	−0.78282561	2.64748962	0.56875610
76	81	0.29901278	2.64748962	0.92026670
77	82	1.93525134	2.04946406	0.00000000
78	83	1.26663845	2.04946406	−0.92026670
79	84	0.59802555	2.04946406	−1.84053340
80	85	−0.48381284	2.04946406	−1.48902280
81	86	−1.56565123	2.04946406	−1.13751220
82	87	−1.56565123	2.04946406	0.00000000
83	88	−1.56565123	2.04946406	1.13751220
84	89	−0.48381284	2.04946406	1.48902280
85	90	0.59802555	2.04946406	1.84053340
86	91	1.26663845	2.04946406	0.92026670
87	92	2.90287702	1.45143851	0.00000000
88	93	2.23426412	1.45143851	−0.92026670
89	94	1.56565123	1.45143851	−1.84053340
90	95	0.89703833	1.45143851	−2.76080010
91	96	−0.18480006	1.45143851	−2.40928950
92	97	−1.26663845	1.45143851	−2.05777890
93	98	−2.34847684	1.45143851	−1.70626830
94	99	−2.34847684	1.45143851	−0.56875610
95	100	−2.34847684	1.45143851	0.56875610
96	101	−2.34847684	1.45143851	1.70626830
97	102	−1.26663845	1.45143851	2.05777890
98	103	−0.18480006	1.45143851	2.40928950
99	104	0.89703833	1.45143851	2.76080010
100	105	1.56565123	1.45143851	1.84053340
101	106	2.23426412	1.45143851	0.92026670
102	107	2.71807696	0.48381284	−0.56875610
103	108	2.04946406	0.48381284	−1.48902280
104	109	1.38085117	0.48381284	−2.40928950
105	110	0.29901278	0.48381284	−2.76080010
106	111	−0.78282561	0.48381284	−2.40928950
107	112	−1.86466400	0.48381284	−2.05777890
108	113	−2.53327690	0.48381284	−1.13751220
109	114	−2.53327690	0.48381284	0.00000000
110	115	−2.53327690	0.48381284	1.13751220

Table 2: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$.

#	$\mathbf{i_p}$	X	Y	Z
111	116	−1.86466400	0.48381284	2.05777890
112	117	−0.78282561	0.48381284	2.40928950
113	118	0.29901278	0.48381284	2.76080010
114	119	1.38085117	0.48381284	2.40928950
115	120	2.04946406	0.48381284	1.48902280
116	121	2.71807696	0.48381284	0.56875610
117	122	2.53327690	−0.48381284	−1.13751220
118	123	1.86466400	−0.48381284	−2.05777890
119	124	0.78282561	−0.48381284	−2.40928950
120	125	−0.29901278	−0.48381284	−2.76080010
121	126	−1.38085117	−0.48381284	−2.40928950
122	127	−2.04946406	−0.48381284	−1.48902280
123	128	−2.71807696	−0.48381284	−0.56875610
124	129	−2.71807696	−0.48381284	0.56875610
125	130	−2.04946406	−0.48381284	1.48902280
126	131	−1.38085117	−0.48381284	2.40928950
127	132	−0.29901278	−0.48381284	2.76080010
128	133	0.78282561	−0.48381284	2.40928950
129	134	1.86466400	−0.48381284	2.05777890
130	135	2.53327690	−0.48381284	1.13751220
131	136	2.53327690	−0.48381284	0.00000000
132	137	2.34847684	−1.45143851	−1.70626830
133	138	1.26663845	−1.45143851	−2.05777890
134	139	0.18480006	−1.45143851	−2.40928950
135	140	−0.89703833	−1.45143851	−2.76080010
136	141	−1.56565123	−1.45143851	−1.84053340
137	142	−2.23426412	−1.45143851	−0.92026670
138	143	−2.90287702	−1.45143851	0.00000000
139	144	−2.23426412	−1.45143851	0.92026670
140	145	−1.56565123	−1.45143851	1.84053340
141	146	−0.89703833	−1.45143851	2.76080010
142	147	0.18480006	−1.45143851	2.40928950
143	148	1.26663845	−1.45143851	2.05777890
144	149	2.34847684	−1.45143851	1.70626830
145	150	2.34847684	−1.45143851	0.56875610
146	151	2.34847684	−1.45143851	−0.56875610
147	152	1.56565123	−2.04946406	−1.13751220
148	153	0.48381284	−2.04946406	−1.48902280
149	154	−0.59802555	−2.04946406	−1.84053340
150	155	−1.26663845	−2.04946406	−0.92026670
151	156	−1.93525134	−2.04946406	0.00000000
152	157	−1.26663845	−2.04946406	0.92026670
153	158	−0.59802555	−2.04946406	1.84053340
154	159	0.48381284	−2.04946406	1.48902280
155	160	1.56565123	−2.04946406	1.13751220
156	161	1.56565123	−2.04946406	0.00000000
157	162	0.78282561	−2.64748962	−0.56875610
158	163	−0.29901278	−2.64748962	−0.92026670
159	164	−0.96762567	−2.64748962	0.00000000
160	165	−0.29901278	−2.64748962	0.92026670
161	166	0.78282561	−2.64748962	0.56875610
162	167	0.00000000	−3.24551517	0.00000000
163	168	0.80301660	2.48724915	−0.58342571
164	169	1.86554333	1.83057152	−0.58342571
165	170	1.13135542	1.83057152	−1.59394868
166	171	2.15891033	−0.22453832	−1.56854017
167	172	2.36183488	0.83798841	−0.94400263
168	173	1.62764697	0.83798841	−1.95452560
169	174	2.46563538	−0.83798841	−0.62453754
170	175	2.66855993	0.22453832	0.00000000
171	176	2.46563538	−0.83798841	0.62453754
172	177	1.85218529	−1.83057152	−0.62453754
173	178	0.99258310	−2.48724915	0.00000000
174	179	1.85218529	−1.83057152	0.62453754
175	180	−0.30672505	2.48724915	−0.94400263
176	181	0.02161377	1.83057152	−1.95452560
177	182	−1.16632723	1.83057152	−1.56854017
178	183	−0.82463037	−0.22453832	−2.53795131
179	184	−0.16795273	0.83798841	−2.53795131
180	185	−1.35589374	0.83798841	−2.15196588
181	186	0.16795273	−0.83798841	−2.53795131
182	187	0.82463037	0.22453832	−2.53795131
183	188	1.35589374	−0.83798841	−2.15196588
184	189	−0.02161377	−1.83057152	−1.95452560
185	190	0.30672505	−2.48724915	−0.94400263
186	191	1.16632723	−1.83057152	−1.56854017
187	192	−0.99258310	2.48724915	0.00000000
188	193	−1.85218529	1.83057152	−0.62453754
189	194	−1.85218529	1.83057152	0.62453754
190	195	−2.66855993	−0.22453832	0.00000000
191	196	−2.46563538	0.83798841	−0.62453754
192	197	−2.46563538	0.83798841	0.62453754
193	204	−0.30672505	2.48724915	0.94400263
194	205	−1.16632723	1.83057152	1.56854017
195	206	0.02161377	1.83057152	1.95452560
196	207	−0.82463037	−0.22453832	2.53795131
197	208	−1.35589374	0.83798841	2.15196588
198	209	−0.16795273	0.83798841	2.53795131
199	216	0.80301660	2.48724915	0.58342571
200	217	1.13135542	1.83057152	1.59394868
201	218	1.86554333	1.83057152	0.58342571
202	219	2.15891033	−0.22453832	1.56854017
203	220	1.62764697	0.83798841	1.95452560
204	221	2.36183488	0.83798841	0.94400263
205	222	1.35589374	−0.83798841	2.15196588
206	223	0.82463037	0.22453832	2.53795131
207	224	0.16795273	−0.83798841	2.53795131
208	225	1.16632723	−1.83057152	1.56854017
209	226	0.30672505	−2.48724915	0.94400263
210	227	−0.02161377	−1.83057152	1.95452560
211	228	0.00000000	4.32735356	0.00000000
212	229	0.96762567	3.72932801	0.00000000
213	230	0.29901278	3.72932801	−0.92026670
214	231	−0.78282561	3.72932801	−0.56875610
215	232	−0.78282561	3.72932801	0.56875610
216	233	0.29901278	3.72932801	0.92026670
217	234	1.93525134	3.13130245	0.00000000
218	235	1.26663845	3.13130245	−0.92026670
219	236	0.59802555	3.13130245	−1.84053340
220	237	−0.48381284	3.13130245	−1.48902280

Table 3: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
221	238	−1.56565123	3.13130245	−1.13751220
222	239	−1.56565123	3.13130245	0.00000000
223	240	−1.56565123	3.13130245	1.13751220
224	241	−0.48381284	3.13130245	1.48902280
225	242	0.59802555	3.13130245	1.84053340
226	243	1.26663845	3.13130245	0.92026670
227	244	2.90287702	2.53327690	0.00000000
228	245	2.23426412	2.53327690	−0.92026670
229	246	1.56565123	2.53327690	−1.84053340
230	247	0.89703833	2.53327690	−2.76080010
231	248	−0.18480006	2.53327690	−2.40928950
232	249	−1.26663845	2.53327690	−2.05777890
233	250	−2.34847684	2.53327690	−1.70626830
234	251	−2.34847684	2.53327690	−0.56875610
235	252	−2.34847684	2.53327690	0.56875610
236	253	−2.34847684	2.53327690	1.70626830
237	254	−1.26663845	2.53327690	2.05777890
238	255	−0.18480006	2.53327690	2.40928950
239	256	0.89703833	2.53327690	2.76080010
240	257	1.56565123	2.53327690	1.84053340
241	258	2.23426412	2.53327690	0.92026670
242	259	3.87050269	1.93525134	0.00000000
243	260	3.20188979	1.93525134	−0.92026670
244	261	2.53327690	1.93525134	−1.84053340
245	262	1.86466400	1.93525134	−2.76080010
246	263	1.19605111	1.93525134	−3.68106680
247	264	0.11421272	1.93525134	−3.32955620
248	265	−0.96762567	1.93525134	−2.97804560
249	266	−2.04946406	1.93525134	−2.62653500
250	267	−3.13130245	1.93525134	−2.27502440
251	268	−3.13130245	1.93525134	−1.13751220
252	269	−3.13130245	1.93525134	0.00000000
253	270	−3.13130245	1.93525134	1.13751220
254	271	−3.13130245	1.93525134	2.27502440
255	272	−2.04946406	1.93525134	2.62653500
256	273	−0.96762567	1.93525134	2.97804560
257	274	0.11421272	1.93525134	3.32955620
258	275	1.19605111	1.93525134	3.68106680
259	276	1.86466400	1.93525134	2.76080010
260	277	2.53327690	1.93525134	1.84053340
261	278	3.20188979	1.93525134	0.92026670
262	279	3.68570263	0.96762567	−0.56875610
263	280	3.01708973	0.96762567	−1.48902280
264	281	2.34847684	0.96762567	−2.40928950
265	282	1.67986394	0.96762567	−3.32955620
266	283	0.59802555	0.96762567	−3.68106680
267	284	−0.48381284	0.96762567	−3.32955620
268	285	−1.56565123	0.96762567	−2.97804560
269	286	−2.64748962	0.96762567	−2.62653500
270	287	−3.31610251	0.96762567	−1.70626830
271	288	−3.31610251	0.96762567	−0.56875610
272	289	−3.31610251	0.96762567	0.56875610
273	290	−3.31610251	0.96762567	1.70626830
274	291	−2.64748962	0.96762567	2.62653500
275	292	−1.56565123	0.96762567	2.97804560
276	293	−0.48381284	0.96762567	3.32955620
277	294	0.59802555	0.96762567	3.68106680
278	295	1.67986394	0.96762567	3.32955620
279	296	2.34847684	0.96762567	2.40928950
280	297	3.01708973	0.96762567	1.48902280
281	298	3.68570263	0.96762567	0.56875610
282	299	3.50090257	0.00000000	−1.13751220
283	300	2.83228968	0.00000000	−2.05777890
284	301	2.16367678	0.00000000	−2.97804560
285	302	1.08183839	0.00000000	−3.32955620
286	303	0.00000000	0.00000000	−3.68106680
287	304	−1.08183839	0.00000000	−3.32955620
288	305	−2.16367678	0.00000000	−2.97804560
289	306	−2.83228968	0.00000000	−2.05777890
290	307	−3.50090257	0.00000000	−1.13751220
291	308	−3.50090257	0.00000000	0.00000000
292	309	−3.50090257	0.00000000	1.13751220
293	310	−2.83228968	0.00000000	2.05777890
294	311	−2.16367678	0.00000000	2.97804560
295	312	−1.08183839	0.00000000	3.32955620
296	313	0.00000000	0.00000000	3.68106680
297	314	1.08183839	0.00000000	3.32955620
298	315	2.16367678	0.00000000	2.97804560
299	316	2.83228968	0.00000000	2.05777890
300	317	3.50090257	0.00000000	1.13751220
301	318	3.50090257	0.00000000	0.00000000
302	319	3.31610251	−0.96762567	−1.70626830
303	320	2.64748962	−0.96762567	−2.62653500
304	321	1.56565123	−0.96762567	−2.97804560
305	322	0.48381284	−0.96762567	−3.32955620
306	323	−0.59802555	−0.96762567	−3.68106680
307	324	−1.67986394	−0.96762567	−3.32955620
308	325	−2.34847684	−0.96762567	−2.40928950
309	326	−3.01708973	−0.96762567	−1.48902280
310	327	−3.68570263	−0.96762567	−0.56875610
311	328	−3.68570263	−0.96762567	0.56875610
312	329	−3.01708973	−0.96762567	1.48902280
313	330	−2.34847684	−0.96762567	2.40928950
314	331	−1.67986394	−0.96762567	3.32955620
315	332	−0.59802555	−0.96762567	3.68106680
316	333	0.48381284	−0.96762567	3.32955620
317	334	1.56565123	−0.96762567	2.97804560
318	335	2.64748962	−0.96762567	2.62653500
319	336	3.31610251	−0.96762567	1.70626830
320	337	3.31610251	−0.96762567	0.56875610
321	338	3.31610251	−0.96762567	−0.56875610
322	339	3.13130245	−1.93525134	−2.27502440
323	340	2.04946406	−1.93525134	−2.62653500
324	341	0.96762567	−1.93525134	−2.97804560
325	342	−0.11421272	−1.93525134	−3.32955620
326	343	−1.19605111	−1.93525134	−3.68106680
327	344	−1.86466400	−1.93525134	−2.76080010
328	345	−2.53327690	−1.93525134	−1.84053340
329	346	−3.20188979	−1.93525134	−0.92026670
330	347	−3.87050269	−1.93525134	0.00000000

Table 4: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
331	348	−3.20188979	−1.93525134	0.92026670
332	349	−2.53327690	−1.93525134	1.84053340
333	350	−1.86466400	−1.93525134	2.76080010
334	351	−1.19605111	−1.93525134	3.68106680
335	352	−0.11421272	−1.93525134	3.32955620
336	353	0.96762567	−1.93525134	2.97804560
337	354	2.04946406	−1.93525134	2.62653500
338	355	3.13130245	−1.93525134	2.27502440
339	356	3.13130245	−1.93525134	1.13751220
340	357	3.13130245	−1.93525134	0.00000000
341	358	3.13130245	−1.93525134	−1.13751220
342	359	2.34847684	−2.53327690	−1.70626830
343	360	1.26663845	−2.53327690	−2.05777890
344	361	0.18480006	−2.53327690	−2.40928950
345	362	−0.89703833	−2.53327690	−2.76080010
346	363	−1.56565123	−2.53327690	−1.84053340
347	364	−2.23426412	−2.53327690	−0.92026670
348	365	−2.90287702	−2.53327690	0.00000000
349	366	−2.23426412	−2.53327690	0.92026670
350	367	−1.56565123	−2.53327690	1.84053340
351	368	−0.89703833	−2.53327690	2.76080010
352	369	0.18480006	−2.53327690	2.40928950
353	370	1.26663845	−2.53327690	2.05777890
354	371	2.34847684	−2.53327690	1.70626830
355	372	2.34847684	−2.53327690	0.56875610
356	373	2.34847684	−2.53327690	−0.56875610
357	374	1.56565123	−3.13130245	−1.13751220
358	375	0.48381284	−3.13130245	−1.48902280
359	376	−0.59802555	−3.13130245	−1.84053340
360	377	−1.26663845	−3.13130245	−0.92026670
361	378	−1.93525134	−3.13130245	0.00000000
362	379	−1.26663845	−3.13130245	0.92026670
363	380	−0.59802555	−3.13130245	1.84053340
364	381	0.48381284	−3.13130245	1.48902280
365	382	1.56565123	−3.13130245	1.13751220
366	383	1.56565123	−3.13130245	0.00000000
367	384	0.78282561	−3.72932801	−0.56875610
368	385	−0.29901278	−3.72932801	−0.92026670
369	386	−0.96762567	−3.72932801	0.00000000
370	387	−0.29901278	−3.72932801	0.92026670
371	388	0.78282561	−3.72932801	0.56875610
372	389	0.00000000	−4.32735356	0.00000000
373	390	0.78379860	3.58723456	−0.56946302
374	391	2.85799474	2.30531085	−0.56946302
375	392	1.42476046	2.30531085	−2.54214077
376	393	2.14137760	2.30531085	−1.55580189
377	394	1.10427953	2.94627270	−1.55580189
378	395	1.82089667	2.94627270	−0.56946302
379	397	3.34240892	1.33648249	−0.92141052
380	398	1.90917463	1.33648249	−2.89408827
381	399	2.62579177	1.33648249	−1.90774939
382	400	2.42772367	0.29938442	−2.51734034
383	401	3.14434081	0.29938442	−1.53100147
384	414	−0.29938442	3.58723456	−0.92141052
385	415	0.34157743	2.30531085	−2.89408827
386	416	−1.97744435	2.30531085	−2.14059242
387	417	−0.81793346	2.30531085	−2.51734034
388	418	−1.13841439	2.94627270	−1.53100147
389	419	0.02109650	2.94627270	−1.90774939
390	438	−0.96882835	3.58723456	0.00000000
391	439	−2.64688828	2.30531085	−1.21918190
392	440	−2.64688828	2.30531085	1.21918190
393	441	−2.64688828	2.30531085	0.00000000
394	442	−1.80785831	2.94627270	0.60959095
395	443	−1.80785831	2.94627270	−0.60959095
396	462	−0.29938442	3.58723456	0.92141052
397	463	−1.97744435	2.30531085	2.14059242
398	464	0.34157743	2.30531085	2.89408827
399	465	−0.81793346	2.30531085	2.51734034
400	466	0.02109650	2.94627270	1.90774939
401	467	−1.13841439	2.94627270	1.53100147
402	468	−1.12537603	−0.73771364	3.46355129
403	469	−2.16247410	1.33648249	2.71005543
404	470	0.15654768	1.33648249	3.46355129
405	471	−1.00296321	1.33648249	3.08680336
406	472	−0.48441418	0.29938442	3.46355129
407	473	−1.64392507	0.29938442	3.08680336
408	486	0.78379860	3.58723456	0.56946302
409	487	1.42476046	2.30531085	2.54214077
410	488	2.85799474	2.30531085	0.56946302
411	489	2.14137760	2.30531085	1.55580189
412	490	1.82089667	2.94627270	0.56946302
413	491	1.10427953	2.94627270	1.55580189
414	510	0.00000000	5.40919195	0.00000000
415	511	0.96762567	4.81116640	0.00000000
416	512	0.29901278	4.81116640	−0.92026670
417	513	−0.78282561	4.81116640	−0.56875610
418	514	−0.78282561	4.81116640	0.56875610
419	515	0.29901278	4.81116640	0.92026670
420	516	1.93525134	4.21314084	0.00000000
421	517	1.26663845	4.21314084	−0.92026670
422	518	0.59802555	4.21314084	−1.84053340
423	519	−0.48381284	4.21314084	−1.48902280
424	520	−1.56565123	4.21314084	−1.13751220
425	521	−1.56565123	4.21314084	0.00000000
426	522	−1.56565123	4.21314084	1.13751220
427	523	−0.48381284	4.21314084	1.48902280
428	524	0.59802555	4.21314084	1.84053340
429	525	1.26663845	4.21314084	0.92026670
430	526	2.90287702	3.61511529	0.00000000
431	527	2.23426412	3.61511529	−0.92026670
432	528	1.56565123	3.61511529	−1.84053340
433	529	0.89703833	3.61511529	−2.76080010
434	530	−0.18480006	3.61511529	−2.40928950
435	531	−1.26663845	3.61511529	−2.05777890
436	532	−2.34847684	3.61511529	−1.70626830
437	533	−2.34847684	3.61511529	−0.56875610
438	534	−2.34847684	3.61511529	0.56875610
439	535	−2.34847684	3.61511529	1.70626830
440	536	−1.26663845	3.61511529	2.05777890

Table 5: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	**X**	**Y**	**Z**
441	537	−0.18480006	3.61511529	2.40928950
442	538	0.89703833	3.61511529	2.76080010
443	539	1.56565123	3.61511529	1.84053340
444	540	2.23426412	3.61511529	0.92026670
445	541	3.87050269	3.01708973	0.00000000
446	542	3.20188979	3.01708973	−0.92026670
447	543	2.53327690	3.01708973	−1.84053340
448	544	1.86466400	3.01708973	−2.76080010
449	545	1.19605111	3.01708973	−3.68106680
450	546	0.11421272	3.01708973	−3.32955620
451	547	−0.96762567	3.01708973	−2.97804560
452	548	−2.04946406	3.01708973	−2.62653500
453	549	−3.13130245	3.01708973	−2.27502440
454	550	−3.13130245	3.01708973	−1.13751220
455	551	−3.13130245	3.01708973	0.00000000
456	552	−3.13130245	3.01708973	1.13751220
457	553	−3.13130245	3.01708973	2.27502440
458	554	−2.04946406	3.01708973	2.62653500
459	555	−0.96762567	3.01708973	2.97804560
460	556	0.11421272	3.01708973	3.32955620
461	557	1.19605111	3.01708973	3.68106680
462	558	1.86466400	3.01708973	2.76080010
463	559	2.53327690	3.01708973	1.84053340
464	560	3.20188979	3.01708973	0.92026670
465	561	4.83812836	2.41906418	0.00000000
466	562	4.16951547	2.41906418	−0.92026670
467	563	3.50090257	2.41906418	−1.84053340
468	564	2.83228968	2.41906418	−2.76080010
469	565	2.16367678	2.41906418	−3.68106680
470	566	1.49506388	2.41906418	−4.60133350
471	567	0.41322549	2.41906418	−4.24982290
472	568	−0.66861290	2.41906418	−3.89831230
473	569	−1.75045129	2.41906418	−3.54680170
474	570	−2.83228968	2.41906418	−3.19529110
475	571	−3.91412807	2.41906418	−2.84378050
476	572	−3.91412807	2.41906418	−1.70626830
477	573	−3.91412807	2.41906418	−0.56875610
478	574	−3.91412807	2.41906418	0.56875610
479	575	−3.91412807	2.41906418	1.70626830
480	576	−3.91412807	2.41906418	2.84378050
481	577	−2.83228968	2.41906418	3.19529110
482	578	−1.75045129	2.41906418	3.54680170
483	579	−0.66861290	2.41906418	3.89831230
484	580	0.41322549	2.41906418	4.24982290
485	581	1.49506388	2.41906418	4.60133350
486	582	2.16367678	2.41906418	3.68106680
487	583	2.83228968	2.41906418	2.76080010
488	584	3.50090257	2.41906418	1.84053340
489	585	4.16951547	2.41906418	0.92026670
490	586	4.65332830	1.45143851	−0.56875610
491	587	3.98471541	1.45143851	−1.48902280
492	588	3.31610251	1.45143851	−2.40928950
493	589	2.64748962	1.45143851	−3.32955620
494	590	1.97887672	1.45143851	−4.24982290
495	591	0.89703833	1.45143851	−4.60133350
496	592	−0.18480006	1.45143851	−4.24982290
497	593	−1.26663845	1.45143851	−3.89831230
498	594	−2.34847684	1.45143851	−3.54680170
499	595	−3.43031523	1.45143851	−3.19529110
500	596	−4.09892812	1.45143851	−2.27502440
501	597	−4.09892812	1.45143851	−1.13751220
502	598	−4.09892812	1.45143851	0.00000000
503	599	−4.09892812	1.45143851	1.13751220
504	600	−4.09892812	1.45143851	2.27502440
505	601	−3.43031523	1.45143851	3.19529110
506	602	−2.34847684	1.45143851	3.54680170
507	603	−1.26663845	1.45143851	3.89831230
508	604	−0.18480006	1.45143851	4.24982290
509	605	0.89703833	1.45143851	4.60133350
510	606	1.97887672	1.45143851	4.24982290
511	607	2.64748962	1.45143851	3.32955620
512	608	3.31610251	1.45143851	2.40928950
513	609	3.98471541	1.45143851	1.48902280
514	610	4.65332830	1.45143851	0.56875610
515	611	4.46852824	0.48381284	−1.13751220
516	612	3.79991535	0.48381284	−2.05777890
517	613	3.13130245	0.48381284	−2.97804560
518	614	2.46268956	0.48381284	−3.89831230
519	615	1.38085117	0.48381284	−4.24982290
520	616	0.29901278	0.48381284	−4.60133350
521	617	−0.78282561	0.48381284	−4.24982290
522	618	−1.86466400	0.48381284	−3.89831230
523	619	−2.94650239	0.48381284	−3.54680170
524	620	−3.61511529	0.48381284	−2.62653500
525	621	−4.28372818	0.48381284	−1.70626830
526	622	−4.28372818	0.48381284	−0.56875610
527	623	−4.28372818	0.48381284	0.56875610
528	624	−4.28372818	0.48381284	1.70626830
529	625	−3.61511529	0.48381284	2.62653500
530	626	−2.94650239	0.48381284	3.54680170
531	627	−1.86466400	0.48381284	3.89831230
532	628	−0.78282561	0.48381284	4.24982290
533	629	0.29901278	0.48381284	4.60133350
534	630	1.38085117	0.48381284	4.24982290
535	631	2.46268956	0.48381284	3.89831230
536	632	3.13130245	0.48381284	2.97804560
537	633	3.79991535	0.48381284	2.05777890
538	634	4.46852824	0.48381284	1.13751220
539	635	4.46852824	0.48381284	0.00000000
540	636	4.28372818	−0.48381284	−1.70626830
541	637	3.61511529	−0.48381284	−2.62653500
542	638	2.94650239	−0.48381284	−3.54680170
543	639	1.86466400	−0.48381284	−3.89831230
544	640	0.78282561	−0.48381284	−4.24982290
545	641	−0.29901278	−0.48381284	−4.60133350
546	642	−1.38085117	−0.48381284	−4.24982290
547	643	−2.46268956	−0.48381284	−3.89831230
548	644	−3.13130245	−0.48381284	−2.97804560
549	645	−3.79991535	−0.48381284	−2.05777890
550	646	−4.46852824	−0.48381284	−1.13751220

Table 6: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
551	647	−4.46852824	−0.48381284	0.00000000
552	648	−4.46852824	−0.48381284	1.13751220
553	649	−3.79991535	−0.48381284	2.05777890
554	650	−3.13130245	−0.48381284	2.97804560
555	651	−2.46268956	−0.48381284	3.89831230
556	652	−1.38085117	−0.48381284	4.24982290
557	653	−0.29901278	−0.48381284	4.60133350
558	654	0.78282561	−0.48381284	4.24982290
559	655	1.86466400	−0.48381284	3.89831230
560	656	2.94650239	−0.48381284	3.54680170
561	657	3.61511529	−0.48381284	2.62653500
562	658	4.28372818	−0.48381284	1.70626830
563	659	4.28372818	−0.48381284	0.56875610
564	660	4.28372818	−0.48381284	−0.56875610
565	661	4.09892812	−1.45143851	−2.27502440
566	662	3.43031523	−1.45143851	−3.19529110
567	663	2.34847684	−1.45143851	−3.54680170
568	664	1.26663845	−1.45143851	−3.89831230
569	665	0.18480006	−1.45143851	−4.24982290
570	666	−0.89703833	−1.45143851	−4.60133350
571	667	−1.97887672	−1.45143851	−4.24982290
572	668	−2.64748962	−1.45143851	−3.32955620
573	669	−3.31610251	−1.45143851	−2.40928950
574	670	−3.98471541	−1.45143851	−1.48902280
575	671	−4.65332830	−1.45143851	−0.56875610
576	672	−4.65332830	−1.45143851	0.56875610
577	673	−3.98471541	−1.45143851	1.48902280
578	674	−3.31610251	−1.45143851	2.40928950
579	675	−2.64748962	−1.45143851	3.32955620
580	676	−1.97887672	−1.45143851	4.24982290
581	677	−0.89703833	−1.45143851	4.60133350
582	678	0.18480006	−1.45143851	4.24982290
583	679	1.26663845	−1.45143851	3.89831230
584	680	2.34847684	−1.45143851	3.54680170
585	681	3.43031523	−1.45143851	3.19529110
586	682	4.09892812	−1.45143851	2.27502440
587	683	4.09892812	−1.45143851	1.13751220
588	684	4.09892812	−1.45143851	0.00000000
589	685	4.09892812	−1.45143851	−1.13751220
590	686	3.91412807	−2.41906418	−2.84378050
591	687	2.83228968	−2.41906418	−3.19529110
592	688	1.75045129	−2.41906418	−3.54680170
593	689	0.66861290	−2.41906418	−3.89831230
594	690	−0.41322549	−2.41906418	−4.24982290
595	691	−1.49506388	−2.41906418	−4.60133350
596	692	−2.16367678	−2.41906418	−3.68106680
597	693	−2.83228968	−2.41906418	−2.76080010
598	694	−3.50090257	−2.41906418	−1.84053340
599	695	−4.16951547	−2.41906418	−0.92026670
600	696	−4.83812836	−2.41906418	0.00000000
601	697	−4.16951547	−2.41906418	0.92026670
602	698	−3.50090257	−2.41906418	1.84053340
603	699	−2.83228968	−2.41906418	2.76080010
604	700	−2.16367678	−2.41906418	3.68106680
605	701	−1.49506388	−2.41906418	4.60133350

#	$\mathbf{i_p}$	X	Y	Z
606	702	−0.41322549	−2.41906418	4.24982290
607	703	0.66861290	−2.41906418	3.89831230
608	704	1.75045129	−2.41906418	3.54680170
609	705	2.83228968	−2.41906418	3.19529110
610	706	3.91412807	−2.41906418	2.84378050
611	707	3.91412807	−2.41906418	1.70626830
612	708	3.91412807	−2.41906418	0.56875610
613	709	3.91412807	−2.41906418	−0.56875610
614	710	3.91412807	−2.41906418	−1.70626830
615	711	3.13130245	−3.01708973	−2.27502440
616	712	2.04946406	−3.01708973	−2.62653500
617	713	0.96762567	−3.01708973	−2.97804560
618	714	−0.11421272	−3.01708973	−3.32955620
619	715	−1.19605111	−3.01708973	−3.68106680
620	716	−1.86466400	−3.01708973	−2.76080010
621	717	−2.53327690	−3.01708973	−1.84053340
622	718	−3.20188979	−3.01708973	−0.92026670
623	719	−3.87050269	−3.01708973	0.00000000
624	720	−3.20188979	−3.01708973	0.92026670
625	721	−2.53327690	−3.01708973	1.84053340
626	722	−1.86466400	−3.01708973	2.76080010
627	723	−1.19605111	−3.01708973	3.68106680
628	724	−0.11421272	−3.01708973	3.32955620
629	725	0.96762567	−3.01708973	2.97804560
630	726	2.04946406	−3.01708973	2.62653500
631	727	3.13130245	−3.01708973	2.27502440
632	728	3.13130245	−3.01708973	1.13751220
633	729	3.13130245	−3.01708973	0.00000000
634	730	3.13130245	−3.01708973	−1.13751220
635	731	2.34847684	−3.61511529	−1.70626830
636	732	1.26663845	−3.61511529	−2.05777890
637	733	0.18480006	−3.61511529	−2.40928950
638	734	−0.89703833	−3.61511529	−2.76080010
639	735	−1.56565123	−3.61511529	−1.84053340
640	736	−2.23426412	−3.61511529	−0.92026670
641	737	−2.90287702	−3.61511529	0.00000000
642	738	−2.23426412	−3.61511529	0.92026670
643	739	−1.56565123	−3.61511529	1.84053340
644	740	−0.89703833	−3.61511529	2.76080010
645	741	0.18480006	−3.61511529	2.40928950
646	742	1.26663845	−3.61511529	2.05777890
647	743	2.34847684	−3.61511529	1.70626830
648	744	2.34847684	−3.61511529	0.56875610
649	745	2.34847684	−3.61511529	−0.56875610
650	746	1.56565123	−4.21314084	−1.13751220
651	747	0.48381284	−4.21314084	−1.48902280
652	748	−0.59802555	−4.21314084	−1.84053340
653	749	−1.26663845	−4.21314084	−0.92026670
654	750	−1.93525134	−4.21314084	0.00000000
655	751	−1.26663845	−4.21314084	0.92026670
656	752	−0.59802555	−4.21314084	1.84053340
657	753	0.48381284	−4.21314084	1.48902280
658	754	1.56565123	−4.21314084	1.13751220
659	755	1.56565123	−4.21314084	0.00000000
660	756	0.78282561	−4.81116640	−0.56875610

Table 7: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
661	757	−0.29901278	−4.81116640	−0.92026670
662	758	−0.96762567	−4.81116640	0.00000000
663	759	−0.29901278	−4.81116640	0.92026670
664	760	0.78282561	−4.81116640	0.56875610
665	761	0.00000000	−5.40919195	0.00000000
666	767	1.40459143	3.41577344	−2.50615402
667	768	2.11106408	3.41577344	−1.53377783
668	770	1.08864726	4.04766179	−1.53377783
669	882	−0.29514631	4.67955013	0.90836695
670	884	0.65268621	2.78388509	3.82549550
671	885	−0.49041055	2.78388509	3.45408085
672	886	−1.63350731	2.78388509	3.08266620
673	887	0.33674203	3.41577344	2.85311932
674	888	−0.80635473	3.41577344	2.48170467
675	889	−1.94945149	3.41577344	2.11029002
676	890	0.02079786	4.04766179	1.88074314
677	891	−1.12229890	4.04766179	1.50932848
678	892	−1.42538929	−1.23847892	4.38689716
679	894	0.47027575	1.82877155	4.38689716
680	895	−0.67282101	1.82877155	4.01548250
681	896	−1.81591777	1.82877155	3.64406785
682	897	−0.16161259	0.80635473	4.38689716
683	898	−1.30470936	0.80635473	4.01548250
684	899	−2.44780612	0.80635473	3.64406785
685	900	−0.79350094	−0.21606210	4.38689716
686	901	−1.93659770	−0.21606210	4.01548250
687	922	0.77270308	4.67955013	0.56140165
688	923	1.72053561	2.78388509	3.47853020
689	924	3.83995356	2.78388509	0.56140165
690	925	3.13348091	2.78388509	1.53377783
691	926	2.42700826	2.78388509	2.50615402
692	927	2.81753673	3.41577344	0.56140165
693	928	2.11106408	3.41577344	1.53377783
694	929	1.40459143	3.41577344	2.50615402
695	930	1.79511991	4.04766179	0.56140165
696	931	1.08864726	4.04766179	1.53377783
697	932	3.73171761	−1.23847892	2.71125155
698	933	2.19809237	1.82877155	3.82549550
699	935	3.61103768	1.82877155	1.88074314
700	936	2.90456502	1.82877155	2.85311932
701	937	4.12224609	0.80635473	1.50932848
702	938	3.41577344	0.80635473	2.48170467
703	939	2.70930079	0.80635473	3.45408085
704	940	3.92698185	−0.21606210	2.11029002
705	941	3.22050920	−0.21606210	3.08266620
706	942	2.95901453	−1.82877155	3.27265320
707	943	1.42538929	1.23847892	4.38689716
708	944	−0.47027575	−1.82877155	4.38689716
709	945	0.16161259	−0.80635473	4.38689716
710	946	0.79350094	0.21606210	4.38689716
711	947	0.67282101	−1.82877155	4.01548250
712	948	1.30470936	−0.80635473	4.01548250
713	949	1.93659770	0.21606210	4.01548250
714	950	1.81591777	−1.82877155	3.64406785
715	951	2.44780612	−0.80635473	3.64406785

#	$\mathbf{i_p}$	X	Y	Z
716	962	0.00000000	6.49103034	0.00000000
717	963	0.96762567	5.89300479	0.00000000
718	964	0.29901278	5.89300479	−0.92026670
719	965	−0.78282561	5.89300479	−0.56875610
720	966	−0.78282561	5.89300479	0.56875610
721	967	0.29901278	5.89300479	0.92026670
722	968	1.93525134	5.29497923	0.00000000
723	969	1.26663845	5.29497923	−0.92026670
724	970	0.59802555	5.29497923	−1.84053340
725	971	−0.48381284	5.29497923	−1.48902280
726	972	−1.56565123	5.29497923	−1.13751220
727	973	−1.56565123	5.29497923	0.00000000
728	974	−1.56565123	5.29497923	1.13751220
729	975	−0.48381284	5.29497923	1.48902280
730	976	0.59802555	5.29497923	1.84053340
731	977	1.26663845	5.29497923	0.92026670
732	978	2.90287702	4.69695368	0.00000000
733	979	2.23426412	4.69695368	−0.92026670
734	980	1.56565123	4.69695368	−1.84053340
735	981	0.89703833	4.69695368	−2.76080010
736	982	−0.18480006	4.69695368	−2.40928950
737	983	−1.26663845	4.69695368	−2.05777890
738	984	−2.34847684	4.69695368	−1.70626830
739	985	−2.34847684	4.69695368	−0.56875610
740	986	−2.34847684	4.69695368	0.56875610
741	987	−2.34847684	4.69695368	1.70626830
742	988	−1.26663845	4.69695368	2.05777890
743	989	−0.18480006	4.69695368	2.40928950
744	990	0.89703833	4.69695368	2.76080010
745	991	1.56565123	4.69695368	1.84053340
746	992	2.23426412	4.69695368	0.92026670
747	993	3.87050269	4.09892812	0.00000000
748	994	3.20188979	4.09892812	−0.92026670
749	995	2.53327690	4.09892812	−1.84053340
750	996	1.86466400	4.09892812	−2.76080010
751	997	1.19605111	4.09892812	−3.68106680
752	998	0.11421272	4.09892812	−3.32955620
753	999	−0.96762567	4.09892812	−2.97804560
754	1000	−2.04946406	4.09892812	−2.62653500
755	1001	−3.13130245	4.09892812	−2.27502440
756	1002	−3.13130245	4.09892812	−1.13751220
757	1003	−3.13130245	4.09892812	0.00000000
758	1004	−3.13130245	4.09892812	1.13751220
759	1005	−3.13130245	4.09892812	2.27502440
760	1006	−2.04946406	4.09892812	2.62653500
761	1007	−0.96762567	4.09892812	2.97804560
762	1008	0.11421272	4.09892812	3.32955620
763	1009	1.19605111	4.09892812	3.68106680
764	1010	1.86466400	4.09892812	2.76080010
765	1011	2.53327690	4.09892812	1.84053340
766	1012	3.20188979	4.09892812	0.92026670
767	1013	4.83812836	3.50090257	0.00000000
768	1014	4.16951547	3.50090257	−0.92026670
769	1015	3.50090257	3.50090257	−1.84053340
770	1016	2.83228968	3.50090257	−2.76080010

Table 8: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
771	1017	2.16367678	3.50090257	−3.68106680
772	1018	1.49506388	3.50090257	−4.60133350
773	1019	0.41322549	3.50090257	−4.24982290
774	1020	−0.66861290	3.50090257	−3.89831230
775	1021	−1.75045129	3.50090257	−3.54680170
776	1022	−2.83228968	3.50090257	−3.19529110
777	1023	−3.91412807	3.50090257	−2.84378050
778	1024	−3.91412807	3.50090257	−1.70626830
779	1025	−3.91412807	3.50090257	−0.56875610
780	1026	−3.91412807	3.50090257	0.56875610
781	1027	−3.91412807	3.50090257	1.70626830
782	1028	−3.91412807	3.50090257	2.84378050
783	1029	−2.83228968	3.50090257	3.19529110
784	1030	−1.75045129	3.50090257	3.54680170
785	1031	−0.66861290	3.50090257	3.89831230
786	1032	0.41322549	3.50090257	4.24982290
787	1033	1.49506388	3.50090257	4.60133350
788	1034	2.16367678	3.50090257	3.68106680
789	1035	2.83228968	3.50090257	2.76080010
790	1036	3.50090257	3.50090257	1.84053340
791	1037	4.16951547	3.50090257	0.92026670
792	1038	5.80575403	2.90287702	0.00000000
793	1039	5.13714114	2.90287702	−0.92026670
794	1040	4.46852824	2.90287702	−1.84053340
795	1041	3.79991535	2.90287702	−2.76080010
796	1042	3.13130245	2.90287702	−3.68106680
797	1043	2.46268956	2.90287702	−4.60133350
798	1044	1.79407666	2.90287702	−5.52160021
799	1045	0.71223827	2.90287702	−5.17008960
800	1046	−0.36960012	2.90287702	−4.81857900
801	1047	−1.45143851	2.90287702	−4.46706840
802	1048	−2.53327690	2.90287702	−4.11555780
803	1049	−3.61511529	2.90287702	−3.76404720
804	1050	−4.69695368	2.90287702	−3.41253660
805	1051	−4.69695368	2.90287702	−2.27502440
806	1052	−4.69695368	2.90287702	−1.13751220
807	1053	−4.69695368	2.90287702	0.00000000
808	1054	−4.69695368	2.90287702	1.13751220
809	1055	−4.69695368	2.90287702	2.27502440
810	1056	−4.69695368	2.90287702	3.41253660
811	1057	−3.61511529	2.90287702	3.76404720
812	1058	−2.53327690	2.90287702	4.11555780
813	1059	−1.45143851	2.90287702	4.46706840
814	1060	−0.36960012	2.90287702	4.81857900
815	1061	0.71223827	2.90287702	5.17008960
816	1062	1.79407666	2.90287702	5.52160021
817	1063	2.46268956	2.90287702	4.60133350
818	1064	3.13130245	2.90287702	3.68106680
819	1065	3.79991535	2.90287702	2.76080010
820	1066	4.46852824	2.90287702	1.84053340
821	1067	5.13714114	2.90287702	0.92026670
822	1068	5.62095397	1.93525134	−0.56875610
823	1069	4.95234108	1.93525134	−1.48902280
824	1070	4.28372818	1.93525134	−2.40928950
825	1071	3.61511529	1.93525134	−3.32955620
826	1072	2.94650239	1.93525134	−4.24982290
827	1073	2.27788950	1.93525134	−5.17008960
828	1074	1.19605111	1.93525134	−5.52160021
829	1075	0.11421272	1.93525134	−5.17008960
830	1076	−0.96762567	1.93525134	−4.81857900
831	1077	−2.04946406	1.93525134	−4.46706840
832	1078	−3.13130245	1.93525134	−4.11555780
833	1079	−4.21314084	1.93525134	−3.76404720
834	1080	−4.88175374	1.93525134	−2.84378050
835	1081	−4.88175374	1.93525134	−1.70626830
836	1082	−4.88175374	1.93525134	−0.56875610
837	1083	−4.88175374	1.93525134	0.56875610
838	1084	−4.88175374	1.93525134	1.70626830
839	1085	−4.88175374	1.93525134	2.84378050
840	1086	−4.21314084	1.93525134	3.76404720
841	1087	−3.13130245	1.93525134	4.11555780
842	1088	−2.04946406	1.93525134	4.46706840
843	1089	−0.96762567	1.93525134	4.81857900
844	1090	0.11421272	1.93525134	5.17008960
845	1091	1.19605111	1.93525134	5.52160021
846	1092	2.27788950	1.93525134	5.17008960
847	1093	2.94650239	1.93525134	4.24982290
848	1094	3.61511529	1.93525134	3.32955620
849	1095	4.28372818	1.93525134	2.40928950
850	1096	4.95234108	1.93525134	1.48902280
851	1097	5.62095397	1.93525134	0.56875610
852	1098	5.43615392	0.96762567	−1.13751220
853	1099	4.76754102	0.96762567	−2.05777890
854	1100	4.09892812	0.96762567	−2.97804560
855	1101	3.43031523	0.96762567	−3.89831230
856	1102	2.76170233	0.96762567	−4.81857900
857	1103	1.67986394	0.96762567	−5.17008960
858	1104	0.59802555	0.96762567	−5.52160021
859	1105	−0.48381284	0.96762567	−5.17008960
860	1106	−1.56565123	0.96762567	−4.81857900
861	1107	−2.64748962	0.96762567	−4.46706840
862	1108	−3.72932801	0.96762567	−4.11555780
863	1109	−4.39794090	0.96762567	−3.19529110
864	1110	−5.06655380	0.96762567	−2.27502440
865	1111	−5.06655380	0.96762567	−1.13751220
866	1112	−5.06655380	0.96762567	0.00000000
867	1113	−5.06655380	0.96762567	1.13751220
868	1114	−5.06655380	0.96762567	2.27502440
869	1115	−4.39794090	0.96762567	3.19529110
870	1116	−3.72932801	0.96762567	4.11555780
871	1117	−2.64748962	0.96762567	4.46706840
872	1118	−1.56565123	0.96762567	4.81857900
873	1119	−0.48381284	0.96762567	5.17008960
874	1120	0.59802555	0.96762567	5.52160021
875	1121	1.67986394	0.96762567	5.17008960
876	1122	2.76170233	0.96762567	4.81857900
877	1123	3.43031523	0.96762567	3.89831230
878	1124	4.09892812	0.96762567	2.97804560
879	1125	4.76754102	0.96762567	2.05777890
880	1126	5.43615392	0.96762567	1.13751220

Table 9: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
881	1127	5.43615392	0.96762567	0.00000000
882	1128	5.25135386	0.00000000	−1.70626830
883	1129	4.58274096	0.00000000	−2.62653500
884	1130	3.91412807	0.00000000	−3.54680170
885	1131	3.24551517	0.00000000	−4.46706840
886	1132	2.16367678	0.00000000	−4.81857900
887	1133	1.08183839	0.00000000	−5.17008960
888	1134	0.00000000	0.00000000	−5.52160021
889	1135	−1.08183839	0.00000000	−5.17008960
890	1136	−2.16367678	0.00000000	−4.81857900
891	1137	−3.24551517	0.00000000	−4.46706840
892	1138	−3.91412807	0.00000000	−3.54680170
893	1139	−4.58274096	0.00000000	−2.62653500
894	1140	−5.25135386	0.00000000	−1.70626830
895	1141	−5.25135386	0.00000000	−0.56875610
896	1142	−5.25135386	0.00000000	0.56875610
897	1143	−5.25135386	0.00000000	1.70626830
898	1144	−4.58274096	0.00000000	2.62653500
899	1145	−3.91412807	0.00000000	3.54680170
900	1146	−3.24551517	0.00000000	4.46706840
901	1147	−2.16367678	0.00000000	4.81857900
902	1148	−1.08183839	0.00000000	5.17008960
903	1149	0.00000000	0.00000000	5.52160021
904	1150	1.08183839	0.00000000	5.17008960
905	1151	2.16367678	0.00000000	4.81857900
906	1152	3.24551517	0.00000000	4.46706840
907	1153	3.91412807	0.00000000	3.54680170
908	1154	4.58274096	0.00000000	2.62653500
909	1155	5.25135386	0.00000000	1.70626830
910	1156	5.25135386	0.00000000	0.56875610
911	1157	5.25135386	0.00000000	−0.56875610
912	1158	5.06655380	−0.96762567	−2.27502440
913	1159	4.39794090	−0.96762567	−3.19529110
914	1160	3.72932801	−0.96762567	−4.11555780
915	1161	2.64748962	−0.96762567	−4.46706840
916	1162	1.56565123	−0.96762567	−4.81857900
917	1163	0.48381284	−0.96762567	−5.17008960
918	1164	−0.59802555	−0.96762567	−5.52160021
919	1165	−1.67986394	−0.96762567	−5.17008960
920	1166	−2.76170233	−0.96762567	−4.81857900
921	1167	−3.43031523	−0.96762567	−3.89831230
922	1168	−4.09892812	−0.96762567	−2.97804560
923	1169	−4.76754102	−0.96762567	−2.05777890
924	1170	−5.43615392	−0.96762567	−1.13751220
925	1171	−5.43615392	−0.96762567	0.00000000
926	1172	−5.43615392	−0.96762567	1.13751220
927	1173	−4.76754102	−0.96762567	2.05777890
928	1174	−4.09892812	−0.96762567	2.97804560
929	1175	−3.43031523	−0.96762567	3.89831230
930	1176	−2.76170233	−0.96762567	4.81857900
931	1177	−1.67986394	−0.96762567	5.17008960
932	1178	−0.59802555	−0.96762567	5.52160021
933	1179	0.48381284	−0.96762567	5.17008960
934	1180	1.56565123	−0.96762567	4.81857900
935	1181	2.64748962	−0.96762567	4.46706840
936	1182	3.72932801	−0.96762567	4.11555780
937	1183	4.39794090	−0.96762567	3.19529110
938	1184	5.06655380	−0.96762567	2.27502440
939	1185	5.06655380	−0.96762567	1.13751220
940	1186	5.06655380	−0.96762567	0.00000000
941	1187	5.06655380	−0.96762567	−1.13751220
942	1188	4.88175374	−1.93525134	−2.84378050
943	1189	4.21314084	−1.93525134	−3.76404720
944	1190	3.13130245	−1.93525134	−4.11555780
945	1191	2.04946406	−1.93525134	−4.46706840
946	1192	0.96762567	−1.93525134	−4.81857900
947	1193	−0.11421272	−1.93525134	−5.17008960
948	1194	−1.19605111	−1.93525134	−5.52160021
949	1195	−2.27788950	−1.93525134	−5.17008960
950	1196	−2.94650239	−1.93525134	−4.24982290
951	1197	−3.61511529	−1.93525134	−3.32955620
952	1198	−4.28372818	−1.93525134	−2.40928950
953	1199	−4.95234108	−1.93525134	−1.48902280
954	1200	−5.62095397	−1.93525134	−0.56875610
955	1201	−5.62095397	−1.93525134	0.56875610
956	1202	−4.95234108	−1.93525134	1.48902280
957	1203	−4.28372818	−1.93525134	2.40928950
958	1204	−3.61511529	−1.93525134	3.32955620
959	1205	−2.94650239	−1.93525134	4.24982290
960	1206	−2.27788950	−1.93525134	5.17008960
961	1207	−1.19605111	−1.93525134	5.52160021
962	1208	−0.11421272	−1.93525134	5.17008960
963	1209	0.96762567	−1.93525134	4.81857900
964	1210	2.04946406	−1.93525134	4.46706840
965	1211	3.13130245	−1.93525134	4.11555780
966	1212	4.21314084	−1.93525134	3.76404720
967	1213	4.88175374	−1.93525134	2.84378050
968	1214	4.88175374	−1.93525134	1.70626830
969	1215	4.88175374	−1.93525134	0.56875610
970	1216	4.88175374	−1.93525134	−0.56875610
971	1217	4.88175374	−1.93525134	−1.70626830
972	1218	4.69695368	−2.90287702	−3.41253660
973	1219	3.61511529	−2.90287702	−3.76404720
974	1220	2.53327690	−2.90287702	−4.11555780
975	1221	1.45143851	−2.90287702	−4.46706840
976	1222	0.36960012	−2.90287702	−4.81857900
977	1223	−0.71223827	−2.90287702	−5.17008960
978	1224	−1.79407666	−2.90287702	−5.52160021
979	1225	−2.46268956	−2.90287702	−4.60133350
980	1226	−3.13130245	−2.90287702	−3.68106680
981	1227	−3.79991535	−2.90287702	−2.76080010
982	1228	−4.46852824	−2.90287702	−1.84053340
983	1229	−5.13714114	−2.90287702	−0.92026670
984	1230	−5.80575403	−2.90287702	0.00000000
985	1231	−5.13714114	−2.90287702	0.92026670
986	1232	−4.46852824	−2.90287702	1.84053340
987	1233	−3.79991535	−2.90287702	2.76080010
988	1234	−3.13130245	−2.90287702	3.68106680
989	1235	−2.46268956	−2.90287702	4.60133350
990	1236	−1.79407666	−2.90287702	5.52160021

Table 10: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
991	1237	−0.71223827	−2.90287702	5.17008960
992	1238	0.36960012	−2.90287702	4.81857900
993	1239	1.45143851	−2.90287702	4.46706840
994	1240	2.53327690	−2.90287702	4.11555780
995	1241	3.61511529	−2.90287702	3.76404720
996	1242	4.69695368	−2.90287702	3.41253660
997	1243	4.69695368	−2.90287702	2.27502440
998	1244	4.69695368	−2.90287702	1.13751220
999	1245	4.69695368	−2.90287702	0.00000000
1000	1246	4.69695368	−2.90287702	−1.13751220
1001	1247	4.69695368	−2.90287702	−2.27502440
1002	1248	3.91412807	−3.50090257	−2.84378050
1003	1249	2.83228968	−3.50090257	−3.19529110
1004	1250	1.75045129	−3.50090257	−3.54680170
1005	1251	0.66861290	−3.50090257	−3.89831230
1006	1252	−0.41322549	−3.50090257	−4.24982290
1007	1253	−1.49506388	−3.50090257	−4.60133350
1008	1254	−2.16367678	−3.50090257	−3.68106680
1009	1255	−2.83228968	−3.50090257	−2.76080010
1010	1256	−3.50090257	−3.50090257	−1.84053340
1011	1257	−4.16951547	−3.50090257	−0.92026670
1012	1258	−4.83812836	−3.50090257	0.00000000
1013	1259	−4.16951547	−3.50090257	0.92026670
1014	1260	−3.50090257	−3.50090257	1.84053340
1015	1261	−2.83228968	−3.50090257	2.76080010
1016	1262	−2.16367678	−3.50090257	3.68106680
1017	1263	−1.49506388	−3.50090257	4.60133350
1018	1264	−0.41322549	−3.50090257	4.24982290
1019	1265	0.66861290	−3.50090257	3.89831230
1020	1266	1.75045129	−3.50090257	3.54680170
1021	1267	2.83228968	−3.50090257	3.19529110
1022	1268	3.91412807	−3.50090257	2.84378050
1023	1269	3.91412807	−3.50090257	1.70626830
1024	1270	3.91412807	−3.50090257	0.56875610
1025	1271	3.91412807	−3.50090257	−0.56875610
1026	1272	3.91412807	−3.50090257	−1.70626830
1027	1273	3.13130245	−4.09892812	−2.27502440
1028	1274	2.04946406	−4.09892812	−2.62653500
1029	1275	0.96762567	−4.09892812	−2.97804560
1030	1276	−0.11421272	−4.09892812	−3.32955620
1031	1277	−1.19605111	−4.09892812	−3.68106680
1032	1278	−1.86466400	−4.09892812	−2.76080010
1033	1279	−2.53327690	−4.09892812	−1.84053340
1034	1280	−3.20188979	−4.09892812	−0.92026670
1035	1281	−3.87050269	−4.09892812	0.00000000
1036	1282	−3.20188979	−4.09892812	0.92026670
1037	1283	−2.53327690	−4.09892812	1.84053340
1038	1284	−1.86466400	−4.09892812	2.76080010
1039	1285	−1.19605111	−4.09892812	3.68106680
1040	1286	−0.11421272	−4.09892812	3.32955620
1041	1287	0.96762567	−4.09892812	2.97804560
1042	1288	2.04946406	−4.09892812	2.62653500
1043	1289	3.13130245	−4.09892812	2.27502440
1044	1290	3.13130245	−4.09892812	1.13751220
1045	1291	3.13130245	−4.09892812	0.00000000

#	$\mathbf{i_p}$	X	Y	Z
1046	1292	3.13130245	−4.09892812	−1.13751220
1047	1293	2.34847684	−4.69695368	−1.70626830
1048	1294	1.26663845	−4.69695368	−2.05777890
1049	1295	0.18480006	−4.69695368	−2.40928950
1050	1296	−0.89703833	−4.69695368	−2.76080010
1051	1297	−1.56565123	−4.69695368	−1.84053340
1052	1298	−2.23426412	−4.69695368	−0.92026670
1053	1299	−2.90287702	−4.69695368	0.00000000
1054	1300	−2.23426412	−4.69695368	0.92026670
1055	1301	−1.56565123	−4.69695368	1.84053340
1056	1302	−0.89703833	−4.69695368	2.76080010
1057	1303	0.18480006	−4.69695368	2.40928950
1058	1304	1.26663845	−4.69695368	2.05777890
1059	1305	2.34847684	−4.69695368	1.70626830
1060	1306	2.34847684	−4.69695368	0.56875610
1061	1307	2.34847684	−4.69695368	−0.56875610
1062	1308	1.56565123	−5.29497923	−1.13751220
1063	1309	0.48381284	−5.29497923	−1.48902280
1064	1310	−0.59802555	−5.29497923	−1.84053340
1065	1311	−1.26663845	−5.29497923	−0.92026670
1066	1312	−1.93525134	−5.29497923	0.00000000
1067	1313	−1.26663845	−5.29497923	0.92026670
1068	1314	−0.59802555	−5.29497923	1.84053340
1069	1315	0.48381284	−5.29497923	1.48902280
1070	1316	1.56565123	−5.29497923	1.13751220
1071	1317	1.56565123	−5.29497923	0.00000000
1072	1318	0.78282561	−5.89300479	−0.56875610
1073	1319	−0.29901278	−5.89300479	−0.92026670
1074	1320	−0.96762567	−5.89300479	0.00000000
1075	1321	−0.29901278	−5.89300479	0.92026670
1076	1322	0.78282561	−5.89300479	0.56875610
1077	1323	0.00000000	−6.49103034	0.00000000
1078	1492	−1.70445005	−3.89026788	−3.44600888
1079	1493	−1.39145969	−4.51624861	−2.48272359
1080	1494	−1.07846932	−5.14222933	−1.51943831
1081	1495	−2.71730814	−3.26428716	−3.44600888
1082	1496	−2.40431778	−3.89026788	−2.48272359
1083	1497	−2.09132741	−4.51624861	−1.51943831
1084	1498	−1.77833705	−5.14222933	−0.55615302
1085	1499	−3.41717587	−3.26428716	−2.48272359
1086	1500	−3.10418550	−3.89026788	−1.51943831
1087	1501	−2.79119514	−4.51624861	−0.55615302
1088	1502	−4.11704359	−3.26428716	−1.51943831
1089	1503	−3.80405323	−3.89026788	−0.55615302
1090	1586	4.39669693	1.30524504	2.45850282
1091	1587	3.69682920	1.30524504	3.42178811
1092	1590	4.20325825	0.29238695	3.05384587
1093	1624	0.00000000	7.57286873	0.00000000
1094	1625	0.96762567	6.97484318	0.00000000
1095	1626	0.29901278	6.97484318	−0.92026670
1096	1627	−0.78282561	6.97484318	−0.56875610
1097	1628	−0.78282561	6.97484318	0.56875610
1098	1629	0.29901278	6.97484318	0.92026670
1099	1630	1.93525134	6.37681762	0.00000000
1100	1631	1.26663845	6.37681762	−0.92026670

Table 11: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
1101	1632	0.59802555	6.37681762	−1.84053340
1102	1633	−0.48381284	6.37681762	−1.48902280
1103	1634	−1.56565123	6.37681762	−1.13751220
1104	1635	−1.56565123	6.37681762	0.00000000
1105	1636	−1.56565123	6.37681762	1.13751220
1106	1637	−0.48381284	6.37681762	1.48902280
1107	1638	0.59802555	6.37681762	1.84053340
1108	1639	1.26663845	6.37681762	0.92026670
1109	1640	2.90287702	5.77879207	0.00000000
1110	1641	2.23426412	5.77879207	−0.92026670
1111	1642	1.56565123	5.77879207	−1.84053340
1112	1643	0.89703833	5.77879207	−2.76080010
1113	1644	−0.18480006	5.77879207	−2.40928950
1114	1645	−1.26663845	5.77879207	−2.05777890
1115	1646	−2.34847684	5.77879207	−1.70626830
1116	1647	−2.34847684	5.77879207	−0.56875610
1117	1648	−2.34847684	5.77879207	0.56875610
1118	1649	−2.34847684	5.77879207	1.70626830
1119	1650	−1.26663845	5.77879207	2.05777890
1120	1651	−0.18480006	5.77879207	2.40928950
1121	1652	0.89703833	5.77879207	2.76080010
1122	1653	1.56565123	5.77879207	1.84053340
1123	1654	2.23426412	5.77879207	0.92026670
1124	1655	3.87050269	5.18076651	0.00000000
1125	1656	3.20188979	5.18076651	−0.92026670
1126	1657	2.53327690	5.18076651	−1.84053340
1127	1658	1.86466400	5.18076651	−2.76080010
1128	1659	1.19605111	5.18076651	−3.68106680
1129	1660	0.11421272	5.18076651	−3.32955620
1130	1661	−0.96762567	5.18076651	−2.97804560
1131	1662	−2.04946406	5.18076651	−2.62653500
1132	1663	−3.13130245	5.18076651	−2.27502440
1133	1664	−3.13130245	5.18076651	−1.13751220
1134	1665	−3.13130245	5.18076651	0.00000000
1135	1666	−3.13130245	5.18076651	1.13751220
1136	1667	−3.13130245	5.18076651	2.27502440
1137	1668	−2.04946406	5.18076651	2.62653500
1138	1669	−0.96762567	5.18076651	2.97804560
1139	1670	0.11421272	5.18076651	3.32955620
1140	1671	1.19605111	5.18076651	3.68106680
1141	1672	1.86466400	5.18076651	2.76080010
1142	1673	2.53327690	5.18076651	1.84053340
1143	1674	3.20188979	5.18076651	0.92026670
1144	1675	4.83812836	4.58274096	0.00000000
1145	1676	4.16951547	4.58274096	−0.92026670
1146	1677	3.50090257	4.58274096	−1.84053340
1147	1678	2.83228968	4.58274096	−2.76080010
1148	1679	2.16367678	4.58274096	−3.68106680
1149	1680	1.49506388	4.58274096	−4.60133350
1150	1681	0.41322549	4.58274096	−4.24982290
1151	1682	−0.66861290	4.58274096	−3.89831230
1152	1683	−1.75045129	4.58274096	−3.54680170
1153	1684	−2.83228968	4.58274096	−3.19529110
1154	1685	−3.91412807	4.58274096	−2.84378050
1155	1686	−3.91412807	4.58274096	−1.70626830

#	$\mathbf{i_p}$	X	Y	Z
1156	1687	−3.91412807	4.58274096	−0.56875610
1157	1688	−3.91412807	4.58274096	0.56875610
1158	1689	−3.91412807	4.58274096	1.70626830
1159	1690	−3.91412807	4.58274096	2.84378050
1160	1691	−2.83228968	4.58274096	3.19529110
1161	1692	−1.75045129	4.58274096	3.54680170
1162	1693	−0.66861290	4.58274096	3.89831230
1163	1694	0.41322549	4.58274096	4.24982290
1164	1695	1.49506388	4.58274096	4.60133350
1165	1696	2.16367678	4.58274096	3.68106680
1166	1697	2.83228968	4.58274096	2.76080010
1167	1698	3.50090257	4.58274096	1.84053340
1168	1699	4.16951547	4.58274096	0.92026670
1169	1701	5.13714114	3.98471541	−0.92026670
1170	1702	4.46852824	3.98471541	−1.84053340
1171	1703	3.79991535	3.98471541	−2.76080010
1172	1704	3.13130245	3.98471541	−3.68106680
1173	1705	2.46268956	3.98471541	−4.60133350
1174	1707	0.71223827	3.98471541	−5.17008960
1175	1708	−0.36960012	3.98471541	−4.81857900
1176	1709	−1.45143851	3.98471541	−4.46706840
1177	1710	−2.53327690	3.98471541	−4.11555780
1178	1711	−3.61511529	3.98471541	−3.76404720
1179	1713	−4.69695368	3.98471541	−2.27502440
1180	1714	−4.69695368	3.98471541	−1.13751220
1181	1715	−4.69695368	3.98471541	0.00000000
1182	1716	−4.69695368	3.98471541	1.13751220
1183	1717	−4.69695368	3.98471541	2.27502440
1184	1718	−4.69695368	3.98471541	3.41253660
1185	1719	−3.61511529	3.98471541	3.76404720
1186	1720	−2.53327690	3.98471541	4.11555780
1187	1721	−1.45143851	3.98471541	4.46706840
1188	1722	−0.36960012	3.98471541	4.81857900
1189	1723	0.71223827	3.98471541	5.17008960
1190	1724	1.79407666	3.98471541	5.52160021
1191	1725	2.46268956	3.98471541	4.60133350
1192	1726	3.13130245	3.98471541	3.68106680
1193	1727	3.79991535	3.98471541	2.76080010
1194	1728	4.46852824	3.98471541	1.84053340
1195	1729	5.13714114	3.98471541	0.92026670
1196	1746	−5.47977929	3.38668985	−1.70626830
1197	1747	−5.47977929	3.38668985	−0.56875610
1198	1748	−5.47977929	3.38668985	0.56875610
1199	1749	−5.47977929	3.38668985	1.70626830
1200	1753	−3.31610251	3.38668985	4.68431390
1201	1754	−2.23426412	3.38668985	5.03582450
1202	1755	−1.15242573	3.38668985	5.38733510
1203	1756	−0.07058734	3.38668985	5.73884570
1204	1760	3.43031523	3.38668985	4.60133350
1205	1761	4.09892812	3.38668985	3.68106680
1206	1762	4.76754102	3.38668985	2.76080010
1207	1763	5.43615392	3.38668985	1.84053340
1208	1780	−5.66457935	2.41906418	−2.27502440
1209	1781	−5.66457935	2.41906418	−1.13751220
1210	1782	−5.66457935	2.41906418	0.00000000

Table 12: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
1211	1783	−5.66457935	2.41906418	1.13751220
1212	1784	−5.66457935	2.41906418	2.27502440
1213	1815	−5.84937941	1.45143851	−1.70626830
1214	1816	−5.84937941	1.45143851	−0.56875610
1215	1817	−5.84937941	1.45143851	0.56875610
1216	1818	−5.84937941	1.45143851	1.70626830
1217	1840	2.46268956	0.48381284	−5.73884570
1218	1841	1.38085117	0.48381284	−6.09035631
1219	1850	−6.03417947	0.48381284	−1.13751220
1220	1851	−6.03417947	0.48381284	0.00000000
1221	1852	−6.03417947	0.48381284	1.13751220
1222	1874	2.94650239	−0.48381284	−5.38733510
1223	1875	1.86466400	−0.48381284	−5.73884570
1224	1876	0.78282561	−0.48381284	−6.09035631
1225	1885	−6.21897953	−0.48381284	−0.56875610
1226	1886	−6.21897953	−0.48381284	0.56875610
1227	1908	3.43031523	−1.45143851	−5.03582450
1228	1909	2.34847684	−1.45143851	−5.38733510
1229	1910	1.26663845	−1.45143851	−5.73884570
1230	1911	0.18480006	−1.45143851	−6.09035631
1231	1942	3.91412807	−2.41906418	−4.68431390
1232	1943	2.83228968	−2.41906418	−5.03582450
1233	1944	1.75045129	−2.41906418	−5.38733510
1234	1945	0.66861290	−2.41906418	−5.73884570
1235	1946	−0.41322549	−2.41906418	−6.09035631
1236	1977	3.31610251	−3.38668985	−4.68431390
1237	1978	2.23426412	−3.38668985	−5.03582450
1238	1979	1.15242573	−3.38668985	−5.38733510
1239	1980	0.07058734	−3.38668985	−5.73884570
1240	2011	3.61511529	−3.98471541	−3.76404720
1241	2012	2.53327690	−3.98471541	−4.11555780
1242	2013	1.45143851	−3.98471541	−4.46706840
1243	2014	0.36960012	−3.98471541	−4.81857900
1244	2015	−0.71223827	−3.98471541	−5.17008960
1245	2036	4.69695368	−3.98471541	1.13751220
1246	2037	4.69695368	−3.98471541	0.00000000
1247	2038	4.69695368	−3.98471541	−1.13751220
1248	2039	4.69695368	−3.98471541	−2.27502440
1249	2040	3.91412807	−4.58274096	−2.84378050
1250	2041	2.83228968	−4.58274096	−3.19529110
1251	2042	1.75045129	−4.58274096	−3.54680170
1252	2043	0.66861290	−4.58274096	−3.89831230
1253	2044	−0.41322549	−4.58274096	−4.24982290
1254	2061	3.91412807	−4.58274096	1.70626830
1255	2062	3.91412807	−4.58274096	0.56875610
1256	2063	3.91412807	−4.58274096	−0.56875610
1257	2064	3.91412807	−4.58274096	−1.70626830
1258	2065	3.13130245	−5.18076651	−2.27502440
1259	2066	2.04946406	−5.18076651	−2.62653500
1260	2067	0.96762567	−5.18076651	−2.97804560
1261	2068	−0.11421272	−5.18076651	−3.32955620
1262	2082	3.13130245	−5.18076651	1.13751220
1263	2083	3.13130245	−5.18076651	0.00000000
1264	2084	3.13130245	−5.18076651	−1.13751220
1265	2085	2.34847684	−5.77879207	−1.70626830
1266	2086	1.26663845	−5.77879207	−2.05777890
1267	2087	0.18480006	−5.77879207	−2.40928950
1268	2098	2.34847684	−5.77879207	0.56875610
1269	2099	2.34847684	−5.77879207	−0.56875610
1270	2100	1.56565123	−6.37681762	−1.13751220
1271	2101	0.48381284	−6.37681762	−1.48902280
1272	2109	1.56565123	−6.37681762	0.00000000
1273	2536	0.00000000	8.65470712	0.00000000
1274	2537	0.96762567	8.05668157	0.00000000
1275	2538	0.29901278	8.05668157	−0.92026670
1276	2539	−0.78282561	8.05668157	−0.56875610
1277	2540	−0.78282561	8.05668157	0.56875610
1278	2541	0.29901278	8.05668157	0.92026670
1279	2542	1.93525134	7.45865601	0.00000000
1280	2543	1.26663845	7.45865601	−0.92026670
1281	2544	0.59802555	7.45865601	−1.84053340
1282	2545	−0.48381284	7.45865601	−1.48902280
1283	2546	−1.56565123	7.45865601	−1.13751220
1284	2547	−1.56565123	7.45865601	0.00000000
1285	2548	−1.56565123	7.45865601	1.13751220
1286	2549	−0.48381284	7.45865601	1.48902280
1287	2550	0.59802555	7.45865601	1.84053340
1288	2551	1.26663845	7.45865601	0.92026670
1289	2552	2.90287702	6.86063046	0.00000000
1290	2553	2.23426412	6.86063046	−0.92026670
1291	2554	1.56565123	6.86063046	−1.84053340
1292	2555	0.89703833	6.86063046	−2.76080010
1293	2556	−0.18480006	6.86063046	−2.40928950
1294	2557	−1.26663845	6.86063046	−2.05777890
1295	2558	−2.34847684	6.86063046	−1.70626830
1296	2559	−2.34847684	6.86063046	−0.56875610
1297	2560	−2.34847684	6.86063046	0.56875610
1298	2561	−2.34847684	6.86063046	1.70626830
1299	2562	−1.26663845	6.86063046	2.05777890
1300	2563	−0.18480006	6.86063046	2.40928950
1301	2564	0.89703833	6.86063046	2.76080010
1302	2565	1.56565123	6.86063046	1.84053340
1303	2566	2.23426412	6.86063046	0.92026670
1304	2567	3.87050269	6.26260490	0.00000000
1305	2568	3.20188979	6.26260490	−0.92026670
1306	2569	2.53327690	6.26260490	−1.84053340
1307	2570	1.86466400	6.26260490	−2.76080010
1308	2571	1.19605111	6.26260490	−3.68106680
1309	2572	0.11421272	6.26260490	−3.32955620
1310	2573	−0.96762567	6.26260490	−2.97804560
1311	2574	−2.04946406	6.26260490	−2.62653500
1312	2575	−3.13130245	6.26260490	−2.27502440
1313	2576	−3.13130245	6.26260490	−1.13751220
1314	2577	−3.13130245	6.26260490	0.00000000
1315	2578	−3.13130245	6.26260490	1.13751220
1316	2579	−3.13130245	6.26260490	2.27502440
1317	2580	−2.04946406	6.26260490	2.62653500
1318	2581	−0.96762567	6.26260490	2.97804560
1319	2582	0.11421272	6.26260490	3.32955620
1320	2583	1.19605111	6.26260490	3.68106680

Table 13: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
1321	2584	1.86466400	6.26260490	2.76080010
1322	2585	2.53327690	6.26260490	1.84053340
1323	2586	3.20188979	6.26260490	0.92026670
1324	2587	4.83812836	5.66457935	0.00000000
1325	2588	4.16951547	5.66457935	−0.92026670
1326	2589	3.50090257	5.66457935	−1.84053340
1327	2590	2.83228968	5.66457935	−2.76080010
1328	2591	2.16367678	5.66457935	−3.68106680
1329	2592	1.49506388	5.66457935	−4.60133350
1330	2593	0.41322549	5.66457935	−4.24982290
1331	2594	−0.66861290	5.66457935	−3.89831230
1332	2595	−1.75045129	5.66457935	−3.54680170
1333	2596	−2.83228968	5.66457935	−3.19529110
1334	2597	−3.91412807	5.66457935	−2.84378050
1335	2598	−3.91412807	5.66457935	−1.70626830
1336	2599	−3.91412807	5.66457935	−0.56875610
1337	2600	−3.91412807	5.66457935	0.56875610
1338	2601	−3.91412807	5.66457935	1.70626830
1339	2602	−3.91412807	5.66457935	2.84378050
1340	2603	−2.83228968	5.66457935	3.19529110
1341	2604	−1.75045129	5.66457935	3.54680170
1342	2605	−0.66861290	5.66457935	3.89831230
1343	2606	0.41322549	5.66457935	4.24982290
1344	2607	1.49506388	5.66457935	4.60133350
1345	2608	2.16367678	5.66457935	3.68106680
1346	2609	2.83228968	5.66457935	2.76080010
1347	2610	3.50090257	5.66457935	1.84053340
1348	2611	4.16951547	5.66457935	0.92026670
1349	2613	5.13714114	5.06655380	−0.92026670
1350	2614	4.46852824	5.06655380	−1.84053340
1351	2615	3.79991535	5.06655380	−2.76080010
1352	2616	3.13130245	5.06655380	−3.68106680
1353	2617	2.46268956	5.06655380	−4.60133350
1354	2619	0.71223827	5.06655380	−5.17008960
1355	2620	−0.36960012	5.06655380	−4.81857900
1356	2621	−1.45143851	5.06655380	−4.46706840
1357	2622	−2.53327690	5.06655380	−4.11555780
1358	2623	−3.61511529	5.06655380	−3.76404720
1359	2625	−4.69695368	5.06655380	−2.27502440
1360	2626	−4.69695368	5.06655380	−1.13751220
1361	2627	−4.69695368	5.06655380	0.00000000
1362	2628	−4.69695368	5.06655380	1.13751220
1363	2629	−4.69695368	5.06655380	2.27502440
1364	2630	−4.69695368	5.06655380	3.41253660
1365	2631	−3.61511529	5.06655380	3.76404720
1366	2632	−2.53327690	5.06655380	4.11555780
1367	2633	−1.45143851	5.06655380	4.46706840
1368	2634	−0.36960012	5.06655380	4.81857900
1369	2635	0.71223827	5.06655380	5.17008960
1370	2636	1.79407666	5.06655380	5.52160021
1371	2637	2.46268956	5.06655380	4.60133350
1372	2638	3.13130245	5.06655380	3.68106680
1373	2639	3.79991535	5.06655380	2.76080010
1374	2640	4.46852824	5.06655380	1.84053340
1375	2641	5.13714114	5.06655380	0.92026670

#	$\mathbf{i_p}$	X	Y	Z
1376	2658	−5.47977929	4.46852824	−1.70626830
1377	2659	−5.47977929	4.46852824	−0.56875610
1378	2660	−5.47977929	4.46852824	0.56875610
1379	2661	−5.47977929	4.46852824	1.70626830
1380	2662	−5.47977929	4.46852824	2.84378050
1381	2664	−4.39794090	4.46852824	4.33280330
1382	2665	−3.31610251	4.46852824	4.68431390
1383	2666	−2.23426412	4.46852824	5.03582450
1384	2667	−1.15242573	4.46852824	5.38733510
1385	2668	−0.07058734	4.46852824	5.73884570
1386	2669	1.01125105	4.46852824	6.09035631
1387	2671	2.76170233	4.46852824	5.52160021
1388	2672	3.43031523	4.46852824	4.60133350
1389	2673	4.09892812	4.46852824	3.68106680
1390	2674	4.76754102	4.46852824	2.76080010
1391	2675	5.43615392	4.46852824	1.84053340
1392	3738	0.00000000	9.73654551	0.00000000
1393	3739	0.96762567	9.13851996	0.00000000
1394	3740	0.29901278	9.13851996	−0.92026670
1395	3741	−0.78282561	9.13851996	−0.56875610
1396	3742	−0.78282561	9.13851996	0.56875610
1397	3743	0.29901278	9.13851996	0.92026670
1398	3744	1.93525134	8.54049440	0.00000000
1399	3745	1.26663845	8.54049440	−0.92026670
1400	3746	0.59802555	8.54049440	−1.84053340
1401	3747	−0.48381284	8.54049440	−1.48902280
1402	3748	−1.56565123	8.54049440	−1.13751220
1403	3749	−1.56565123	8.54049440	0.00000000
1404	3750	−1.56565123	8.54049440	1.13751220
1405	3751	−0.48381284	8.54049440	1.48902280
1406	3752	0.59802555	8.54049440	1.84053340
1407	3753	1.26663845	8.54049440	0.92026670
1408	3754	2.90287702	7.94246885	0.00000000
1409	3755	2.23426412	7.94246885	−0.92026670
1410	3756	1.56565123	7.94246885	−1.84053340
1411	3757	0.89703833	7.94246885	−2.76080010
1412	3758	−0.18480006	7.94246885	−2.40928950
1413	3759	−1.26663845	7.94246885	−2.05777890
1414	3760	−2.34847684	7.94246885	−1.70626830
1415	3761	−2.34847684	7.94246885	−0.56875610
1416	3762	−2.34847684	7.94246885	0.56875610
1417	3763	−2.34847684	7.94246885	1.70626830
1418	3764	−1.26663845	7.94246885	2.05777890
1419	3765	−0.18480006	7.94246885	2.40928950
1420	3766	0.89703833	7.94246885	2.76080010
1421	3767	1.56565123	7.94246885	1.84053340
1422	3768	2.23426412	7.94246885	0.92026670
1423	3769	3.87050269	7.34444329	0.00000000
1424	3770	3.20188979	7.34444329	−0.92026670
1425	3771	2.53327690	7.34444329	−1.84053340
1426	3772	1.86466400	7.34444329	−2.76080010
1427	3773	1.19605111	7.34444329	−3.68106680
1428	3774	0.11421272	7.34444329	−3.32955620
1429	3775	−0.96762567	7.34444329	−2.97804560
1430	3776	−2.04946406	7.34444329	−2.62653500

Table 14: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
1431	3777	−3.13130245	7.34444329	−2.27502440
1432	3778	−3.13130245	7.34444329	−1.13751220
1433	3779	−3.13130245	7.34444329	0.00000000
1434	3780	−3.13130245	7.34444329	1.13751220
1435	3781	−3.13130245	7.34444329	2.27502440
1436	3782	−2.04946406	7.34444329	2.62653500
1437	3783	−0.96762567	7.34444329	2.97804560
1438	3784	0.11421272	7.34444329	3.32955620
1439	3785	1.19605111	7.34444329	3.68106680
1440	3786	1.86466400	7.34444329	2.76080010
1441	3787	2.53327690	7.34444329	1.84053340
1442	3788	3.20188979	7.34444329	0.92026670
1443	3789	4.83812836	6.74641774	0.00000000
1444	3790	4.16951547	6.74641774	−0.92026670
1445	3791	3.50090257	6.74641774	−1.84053340
1446	3792	2.83228968	6.74641774	−2.76080010
1447	3793	2.16367678	6.74641774	−3.68106680
1448	3794	1.49506388	6.74641774	−4.60133350
1449	3795	0.41322549	6.74641774	−4.24982290
1450	3796	−0.66861290	6.74641774	−3.89831230
1451	3797	−1.75045129	6.74641774	−3.54680170
1452	3798	−2.83228968	6.74641774	−3.19529110
1453	3799	−3.91412807	6.74641774	−2.84378050
1454	3800	−3.91412807	6.74641774	−1.70626830
1455	3801	−3.91412807	6.74641774	−0.56875610
1456	3802	−3.91412807	6.74641774	0.56875610
1457	3803	−3.91412807	6.74641774	1.70626830
1458	3804	−3.91412807	6.74641774	2.84378050
1459	3805	−2.83228968	6.74641774	3.19529110
1460	3806	−1.75045129	6.74641774	3.54680170
1461	3807	−0.66861290	6.74641774	3.89831230
1462	3808	0.41322549	6.74641774	4.24982290
1463	3809	1.49506388	6.74641774	4.60133350
1464	3810	2.16367678	6.74641774	3.68106680
1465	3811	2.83228968	6.74641774	2.76080010
1466	3812	3.50090257	6.74641774	1.84053340
1467	3813	4.16951547	6.74641774	0.92026670
1468	3815	5.13714114	6.14839219	−0.92026670
1469	3816	4.46852824	6.14839219	−1.84053340
1470	3817	3.79991535	6.14839219	−2.76080010
1471	3818	3.13130245	6.14839219	−3.68106680
1472	3819	2.46268956	6.14839219	−4.60133350
1473	3821	0.71223827	6.14839219	−5.17008960
1474	3822	−0.36960012	6.14839219	−4.81857900
1475	3823	−1.45143851	6.14839219	−4.46706840
1476	3824	−2.53327690	6.14839219	−4.11555780
1477	3825	−3.61511529	6.14839219	−3.76404720
1478	3827	−4.69695368	6.14839219	−2.27502440
1479	3828	−4.69695368	6.14839219	−1.13751220
1480	3829	−4.69695368	6.14839219	0.00000000
1481	3830	−4.69695368	6.14839219	1.13751220
1482	3831	−4.69695368	6.14839219	2.27502440
1483	3832	−4.69695368	6.14839219	3.41253660
1484	3833	−3.61511529	6.14839219	3.76404720
1485	3834	−2.53327690	6.14839219	4.11555780

#	$\mathbf{i_p}$	X	Y	Z
1486	3835	−1.45143851	6.14839219	4.46706840
1487	3836	−0.36960012	6.14839219	4.81857900
1488	3837	0.71223827	6.14839219	5.17008960
1489	3838	1.79407666	6.14839219	5.52160021
1490	3839	2.46268956	6.14839219	4.60133350
1491	3840	3.13130245	6.14839219	3.68106680
1492	3841	3.79991535	6.14839219	2.76080010
1493	3842	4.46852824	6.14839219	1.84053340
1494	3843	5.13714114	6.14839219	0.92026670
1495	3860	−5.47977929	5.55036663	−1.70626830
1496	3861	−5.47977929	5.55036663	−0.56875610
1497	3862	−5.47977929	5.55036663	0.56875610
1498	3863	−5.47977929	5.55036663	1.70626830
1499	3864	−5.47977929	5.55036663	2.84378050
1500	3866	−4.39794090	5.55036663	4.33280330
1501	3867	−3.31610251	5.55036663	4.68431390
1502	3868	−2.23426412	5.55036663	5.03582450
1503	3869	−1.15242573	5.55036663	5.38733510
1504	3870	−0.07058734	5.55036663	5.73884570
1505	3871	1.01125105	5.55036663	6.09035631
1506	3873	2.76170233	5.55036663	5.52160021
1507	3874	3.43031523	5.55036663	4.60133350
1508	3875	4.09892812	5.55036663	3.68106680
1509	3876	4.76754102	5.55036663	2.76080010
1510	3877	5.43615392	5.55036663	1.84053340
1511	5270	0.00000000	10.81838390	0.00000000
1512	5271	0.96762567	10.22035835	0.00000000
1513	5272	0.29901278	10.22035835	−0.92026670
1514	5273	−0.78282561	10.22035835	−0.56875610
1515	5274	−0.78282561	10.22035835	0.56875610
1516	5275	0.29901278	10.22035835	0.92026670
1517	5276	1.93525134	9.62233279	0.00000000
1518	5277	1.26663845	9.62233279	−0.92026670
1519	5278	0.59802555	9.62233279	−1.84053340
1520	5279	−0.48381284	9.62233279	−1.48902280
1521	5280	−1.56565123	9.62233279	−1.13751220
1522	5281	−1.56565123	9.62233279	0.00000000
1523	5282	−1.56565123	9.62233279	1.13751220
1524	5283	−0.48381284	9.62233279	1.48902280
1525	5284	0.59802555	9.62233279	1.84053340
1526	5285	1.26663845	9.62233279	0.92026670
1527	5286	2.90287702	9.02430724	0.00000000
1528	5287	2.23426412	9.02430724	−0.92026670
1529	5288	1.56565123	9.02430724	−1.84053340
1530	5289	0.89703833	9.02430724	−2.76080010
1531	5290	−0.18480006	9.02430724	−2.40928950
1532	5291	−1.26663845	9.02430724	−2.05777890
1533	5292	−2.34847684	9.02430724	−1.70626830
1534	5293	−2.34847684	9.02430724	−0.56875610
1535	5294	−2.34847684	9.02430724	0.56875610
1536	5295	−2.34847684	9.02430724	1.70626830
1537	5296	−1.26663845	9.02430724	2.05777890
1538	5297	−0.18480006	9.02430724	2.40928950
1539	5298	0.89703833	9.02430724	2.76080010
1540	5299	1.56565123	9.02430724	1.84053340

Table 15: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	X	Y	Z
1541	5300	2.23426412	9.02430724	0.92026670
1542	5301	3.87050269	8.42628168	0.00000000
1543	5302	3.20188979	8.42628168	−0.92026670
1544	5303	2.53327690	8.42628168	−1.84053340
1545	5304	1.86466400	8.42628168	−2.76080010
1546	5305	1.19605111	8.42628168	−3.68106680
1547	5306	0.11421272	8.42628168	−3.32955620
1548	5307	−0.96762567	8.42628168	−2.97804560
1549	5308	−2.04946406	8.42628168	−2.62653500
1550	5309	−3.13130245	8.42628168	−2.27502440
1551	5310	−3.13130245	8.42628168	−1.13751220
1552	5311	−3.13130245	8.42628168	0.00000000
1553	5312	−3.13130245	8.42628168	1.13751220
1554	5313	−3.13130245	8.42628168	2.27502440
1555	5314	−2.04946406	8.42628168	2.62653500
1556	5315	−0.96762567	8.42628168	2.97804560
1557	5316	0.11421272	8.42628168	3.32955620
1558	5317	1.19605111	8.42628168	3.68106680
1559	5318	1.86466400	8.42628168	2.76080010
1560	5319	2.53327690	8.42628168	1.84053340
1561	5320	3.20188979	8.42628168	0.92026670
1562	5321	4.83812836	7.82825613	0.00000000
1563	5322	4.16951547	7.82825613	−0.92026670
1564	5323	3.50090257	7.82825613	−1.84053340
1565	5324	2.83228968	7.82825613	−2.76080010
1566	5325	2.16367678	7.82825613	−3.68106680
1567	5326	1.49506388	7.82825613	−4.60133350
1568	5327	0.41322549	7.82825613	−4.24982290
1569	5328	−0.66861290	7.82825613	−3.89831230
1570	5329	−1.75045129	7.82825613	−3.54680170
1571	5330	−2.83228968	7.82825613	−3.19529110
1572	5331	−3.91412807	7.82825613	−2.84378050
1573	5332	−3.91412807	7.82825613	−1.70626830
1574	5333	−3.91412807	7.82825613	−0.56875610
1575	5334	−3.91412807	7.82825613	0.56875610
1576	5335	−3.91412807	7.82825613	1.70626830
1577	5336	−3.91412807	7.82825613	2.84378050
1578	5337	−2.83228968	7.82825613	3.19529110
1579	5338	−1.75045129	7.82825613	3.54680170
1580	5339	−0.66861290	7.82825613	3.89831230
1581	5340	0.41322549	7.82825613	4.24982290
1582	5341	1.49506388	7.82825613	4.60133350
1583	5342	2.16367678	7.82825613	3.68106680
1584	5343	2.83228968	7.82825613	2.76080010
1585	5344	3.50090257	7.82825613	1.84053340
1586	5345	4.16951547	7.82825613	0.92026670
1587	5347	5.13714114	7.23023058	−0.92026670
1588	5348	4.46852824	7.23023058	−1.84053340
1589	5349	3.79991535	7.23023058	−2.76080010
1590	5350	3.13130245	7.23023058	−3.68106680
1591	5351	2.46268956	7.23023058	−4.60133350
1592	5353	0.71223827	7.23023058	−5.17008960
1593	5354	−0.36960012	7.23023058	−4.81857900
1594	5355	−1.45143851	7.23023058	−4.46706840
1595	5356	−2.53327690	7.23023058	−4.11555780

#	$\mathbf{i_p}$	X	Y	Z
1596	5357	−3.61511529	7.23023058	−3.76404720
1597	5359	−4.69695368	7.23023058	−2.27502440
1598	5360	−4.69695368	7.23023058	−1.13751220
1599	5361	−4.69695368	7.23023058	0.00000000
1600	5362	−4.69695368	7.23023058	1.13751220
1601	5363	−4.69695368	7.23023058	2.27502440
1602	5364	−4.69695368	7.23023058	3.41253660
1603	5365	−3.61511529	7.23023058	3.76404720
1604	5366	−2.53327690	7.23023058	4.11555780
1605	5367	−1.45143851	7.23023058	4.46706840
1606	5368	−0.36960012	7.23023058	4.81857900
1607	5369	0.71223827	7.23023058	5.17008960
1608	5370	1.79407666	7.23023058	5.52160021
1609	5371	2.46268956	7.23023058	4.60133350
1610	5372	3.13130245	7.23023058	3.68106680
1611	5373	3.79991535	7.23023058	2.76080010
1612	5374	4.46852824	7.23023058	1.84053340
1613	5375	5.13714114	7.23023058	0.92026670
1614	5392	−5.47977929	6.63220502	−1.70626830
1615	5393	−5.47977929	6.63220502	−0.56875610
1616	5394	−5.47977929	6.63220502	0.56875610
1617	5395	−5.47977929	6.63220502	1.70626830
1618	5396	−5.47977929	6.63220502	2.84378050
1619	5398	−4.39794090	6.63220502	4.33280330
1620	5399	−3.31610251	6.63220502	4.68431390
1621	5400	−2.23426412	6.63220502	5.03582450
1622	5401	−1.15242573	6.63220502	5.38733510
1623	5402	−0.07058734	6.63220502	5.73884570
1624	5403	1.01125105	6.63220502	6.09035631
1625	5405	2.76170233	6.63220502	5.52160021
1626	5406	3.43031523	6.63220502	4.60133350
1627	5407	4.09892812	6.63220502	3.68106680
1628	5408	4.76754102	6.63220502	2.76080010
1629	5409	5.43615392	6.63220502	1.84053340
1630	7172	0.00000000	11.90022229	0.00000000
1631	7173	0.96762567	11.30219674	0.00000000
1632	7174	0.29901278	11.30219674	−0.92026670
1633	7175	−0.78282561	11.30219674	−0.56875610
1634	7176	−0.78282561	11.30219674	0.56875610
1635	7177	0.29901278	11.30219674	0.92026670
1636	7178	1.93525134	10.70417118	0.00000000
1637	7179	1.26663845	10.70417118	−0.92026670
1638	7180	0.59802555	10.70417118	−1.84053340
1639	7181	−0.48381284	10.70417118	−1.48902280
1640	7182	−1.56565123	10.70417118	−1.13751220
1641	7183	−1.56565123	10.70417118	0.00000000
1642	7184	−1.56565123	10.70417118	1.13751220
1643	7185	−0.48381284	10.70417118	1.48902280
1644	7186	0.59802555	10.70417118	1.84053340
1645	7187	1.26663845	10.70417118	0.92026670
1646	7188	2.90287702	10.10614563	0.00000000
1647	7189	2.23426412	10.10614563	−0.92026670
1648	7190	1.56565123	10.10614563	−1.84053340
1649	7191	0.89703833	10.10614563	−2.76080010
1650	7192	−0.18480006	10.10614563	−2.40928950

Table 16: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

#	$\mathbf{i_p}$	**X**	**Y**	**Z**
1651	7193	−1.26663845	10.10614563	−2.05777890
1652	7194	−2.34847684	10.10614563	−1.70626830
1653	7195	−2.34847684	10.10614563	−0.56875610
1654	7196	−2.34847684	10.10614563	0.56875610
1655	7197	−2.34847684	10.10614563	1.70626830
1656	7198	−1.26663845	10.10614563	2.05777890
1657	7199	−0.18480006	10.10614563	2.40928950
1658	7200	0.89703833	10.10614563	2.76080010
1659	7201	1.56565123	10.10614563	1.84053340
1660	7202	2.23426412	10.10614563	0.92026670
1661	7203	3.87050269	9.50812007	0.00000000
1662	7204	3.20188979	9.50812007	−0.92026670
1663	7205	2.53327690	9.50812007	−1.84053340
1664	7206	1.86466400	9.50812007	−2.76080010
1665	7207	1.19605111	9.50812007	−3.68106680
1666	7208	0.11421272	9.50812007	−3.32955620
1667	7209	−0.96762567	9.50812007	−2.97804560
1668	7210	−2.04946406	9.50812007	−2.62653500
1669	7211	−3.13130245	9.50812007	−2.27502440
1670	7212	−3.13130245	9.50812007	−1.13751220
1671	7213	−3.13130245	9.50812007	0.00000000
1672	7214	−3.13130245	9.50812007	1.13751220
1673	7215	−3.13130245	9.50812007	2.27502440
1674	7216	−2.04946406	9.50812007	2.62653500
1675	7217	−0.96762567	9.50812007	2.97804560
1676	7218	0.11421272	9.50812007	3.32955620
1677	7219	1.19605111	9.50812007	3.68106680
1678	7220	1.86466400	9.50812007	2.76080010
1679	7221	2.53327690	9.50812007	1.84053340
1680	7222	3.20188979	9.50812007	0.92026670
1681	7223	4.83812836	8.91009452	0.00000000
1682	7224	4.16951547	8.91009452	−0.92026670
1683	7225	3.50090257	8.91009452	−1.84053340
1684	7226	2.83228968	8.91009452	−2.76080010
1685	7227	2.16367678	8.91009452	−3.68106680
1686	7229	0.41322549	8.91009452	−4.24982290
1687	7230	−0.66861290	8.91009452	−3.89831230
1688	7231	−1.75045129	8.91009452	−3.54680170
1689	7232	−2.83228968	8.91009452	−3.19529110
1690	7233	−3.91412807	8.91009452	−2.84378050
1691	7234	−3.91412807	8.91009452	−1.70626830
1692	7235	−3.91412807	8.91009452	−0.56875610
1693	7236	−3.91412807	8.91009452	0.56875610
1694	7237	−3.91412807	8.91009452	1.70626830
1695	7238	−3.91412807	8.91009452	2.84378050
1696	7239	−2.83228968	8.91009452	3.19529110
1697	7240	−1.75045129	8.91009452	3.54680170
1698	7241	−0.66861290	8.91009452	3.89831230
1699	7242	0.41322549	8.91009452	4.24982290
1700	7243	1.49506388	8.91009452	4.60133350
1701	7244	2.16367678	8.91009452	3.68106680
1702	7245	2.83228968	8.91009452	2.76080010
1703	7246	3.50090257	8.91009452	1.84053340
1704	7247	4.16951547	8.91009452	0.92026670
1705	7249	5.13714114	8.31206897	−0.92026670
1706	7250	4.46852824	8.31206897	−1.84053340
1707	7251	3.79991535	8.31206897	−2.76080010
1708	7252	3.13130245	8.31206897	−3.68106680
1709	7256	−0.36960012	8.31206897	−4.81857900
1710	7257	−1.45143851	8.31206897	−4.46706840
1711	7258	−2.53327690	8.31206897	−4.11555780
1712	7259	−3.61511529	8.31206897	−3.76404720
1713	7261	−4.69695368	8.31206897	−2.27502440
1714	7262	−4.69695368	8.31206897	−1.13751220
1715	7263	−4.69695368	8.31206897	0.00000000
1716	7264	−4.69695368	8.31206897	1.13751220
1717	7265	−4.69695368	8.31206897	2.27502440
1718	7267	−3.61511529	8.31206897	3.76404720
1719	7268	−2.53327690	8.31206897	4.11555780
1720	7269	−1.45143851	8.31206897	4.46706840
1721	7270	−0.36960012	8.31206897	4.81857900
1722	7271	0.71223827	8.31206897	5.17008960
1723	7273	2.46268956	8.31206897	4.60133350
1724	7274	3.13130245	8.31206897	3.68106680
1725	7275	3.79991535	8.31206897	2.76080010
1726	7276	4.46852824	8.31206897	1.84053340
1727	7277	5.13714114	8.31206897	0.92026670
1728	7294	−5.47977929	7.71404341	−1.70626830
1729	7295	−5.47977929	7.71404341	−0.56875610
1730	7296	−5.47977929	7.71404341	0.56875610
1731	7297	−5.47977929	7.71404341	1.70626830
1732	7301	−3.31610251	7.71404341	4.68431390
1733	7302	−2.23426412	7.71404341	5.03582450
1734	7303	−1.15242573	7.71404341	5.38733510
1735	7304	−0.07058734	7.71404341	5.73884570
1736	7308	3.43031523	7.71404341	4.60133350
1737	7309	4.09892812	7.71404341	3.68106680
1738	7310	4.76754102	7.71404341	2.76080010
1739	7311	5.43615392	7.71404341	1.84053340

Table 17: MIF1739 contains C_n, such that $C_n^* = \min(C_n)$ $n = 2, \ldots, 1000$ (cont.)

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
1000	1	6993.629435	7128.821829	135.192394	0
999	1	6985.902614	7120.842638	134.940023	1
998	1	6978.241464	7113.103883	134.862419	5
997	1	6971.087388	7105.735481	134.648093	1
996	1	6963.933352	7098.367102	134.433750	1
995	1	6955.926596	7090.208621	134.282025	1
994	1	6948.023102	7082.249979	134.226877	3
993	1	6940.869074	7074.881405	134.012331	1
992	1	6932.864440	7066.725015	133.860575	1
991	1	6924.961703	7058.765030	133.803327	3
990	1	6917.807708	7051.396344	133.588636	1
989	1	6909.803103	7043.239479	133.436376	1
988	1	6902.030783	7035.349936	133.319153	5
987	1	6894.876803	7027.981154	133.104351	1
986	1	6886.872360	7019.824521	132.952161	1
985	1	6879.172616	7012.262026	133.089410	61
984	1	6872.065567	7004.954394	132.888827	1
983	1	6864.958520	6997.646753	132.688233	1
982	1	6857.851475	6990.339103	132.487628	1
981	1	6850.036687	6982.453534	132.416846	3
980	1	6842.929649	6975.145854	132.216204	1
979	1	6835.114884	6967.259714	132.144830	3
978	1	6828.007853	6959.952005	131.944153	1
977	1	6820.161938	6952.028508	131.866571	3
976	1	6813.086086	6944.757565	131.671479	1
975	1	6805.129064	6936.619136	131.490072	1
974	1	6797.256767	6928.563000	131.306232	5
973	1	6790.059868	6921.278396	131.218527	9
972	1	6782.255647	6913.714239	131.458591	25
971	1	6775.189273	6906.454831	131.265557	1
970	1	6768.122939	6899.195466	131.072527	1
969	1	6761.056348	6891.935744	130.879396	1
968	1	6753.989758	6884.676024	130.686266	1
967	1	6746.923103	6877.416196	130.493093	1
966	1	6739.856274	6870.156135	130.299861	1
965	1	6732.749336	6862.848135	130.098799	1
964	1	6725.642401	6855.540126	129.897726	1
963	1	6717.828309	6847.650109	129.821801	3
962	1	6710.721380	6840.342072	129.620692	1
961	1	6703.105164	6832.457397	129.352233	5
960	1	6695.800389	6825.143469	129.343080	7
959	1	6688.189198	6817.264754	129.075556	5
958	1	6681.036191	6809.895503	128.859312	1
957	1	6673.268269	6802.065906	128.797638	3
956	1	6666.115273	6794.696561	128.581288	1
955	1	6658.500433	6786.813661	128.313228	7
954	1	6651.150418	6779.462540	128.312123	9
953	1	6643.407817	6772.065512	128.657695	23
952	1	6636.341520	6764.806171	128.464651	1
951	1	6629.275211	6757.546799	128.271588	1
950	1	6622.208903	6750.287429	128.078525	1
949	1	6615.142344	6743.027703	127.885360	1
948	1	6608.075824	6735.768021	127.692197	1
947	1	6601.009267	6728.508299	127.499032	1

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
946	1	6593.942750	6721.248620	127.305870	1
945	1	6586.835928	6713.940121	127.104193	1
944	1	6579.729107	6706.631600	126.902493	1
943	1	6571.915736	6698.737233	126.821497	3
942	1	6564.808928	6691.428659	126.619731	1
941	1	6557.196696	6683.553791	126.357095	5
940	1	6549.888846	6676.224783	126.335937	7
939	1	6542.281572	6668.356219	126.074648	5
938	1	6535.129201	6660.986510	125.857309	1
937	1	6527.366545	6653.157765	125.791221	3
936	1	6520.214710	6645.788882	125.574172	1
935	1	6512.609625	6637.923024	125.313399	5
934	1	6505.035252	6630.868620	125.833368	23
933	1	6497.968941	6623.609245	125.640304	1
932	1	6490.902670	6616.349914	125.447244	1
931	1	6483.836439	6609.090626	125.254187	1
930	1	6476.770164	6601.831262	125.061099	1
929	1	6469.703891	6594.571901	124.868010	1
928	1	6462.637620	6587.312542	124.674922	1
927	1	6455.571240	6580.053022	124.481782	1
926	1	6448.504861	6572.793503	124.288642	1
925	1	6441.438485	6565.533988	124.095503	1
924	1	6434.332368	6558.225148	123.892780	1
923	1	6437.852486	6552.722600	114.870114	23
922	1	6421.908138	6546.271539	124.363400	1
921	1	6414.841845	6539.012175	124.170330	1
920	1	6407.775591	6531.752854	123.977263	1
919	1	6400.709376	6524.493575	123.784199	1
918	1	6393.643164	6517.234300	123.591136	1
917	1	6386.576954	6509.975026	123.398072	1
916	1	6379.510784	6502.715796	123.205013	1
915	1	6372.444577	6495.456527	123.011950	1
914	1	6365.378409	6488.197300	122.818891	1
913	1	6358.312244	6480.938076	122.625832	1
912	1	6351.246081	6473.678854	122.432773	1
911	1	6344.179957	6466.419675	122.239718	1
910	1	6337.113874	6459.160539	122.046665	1
909	1	6328.294012	6450.140769	121.846757	1
908	1	6320.468251	6442.132656	121.664405	1
907	1	6312.742740	6434.224282	121.481543	1
906	1	6305.552394	6426.853350	121.300956	3
905	1	6298.486315	6419.594218	121.107903	1
904	1	6289.667453	6410.575785	120.908332	1
903	1	6281.842185	6402.568020	120.725835	1
902	1	6274.117166	6394.659807	120.542641	1
901	1	6266.927214	6387.288891	120.361676	3
900	1	6259.861151	6380.029779	120.168629	1
899	1	6251.042781	6371.011483	119.968702	1
898	1	6243.218512	6363.005202	119.786690	1
897	1	6235.493697	6355.096967	119.603269	1
896	1	6228.304429	6347.726230	119.421801	3
895	1	6221.238379	6340.467138	119.228759	1
894	1	6212.420035	6331.448671	119.028636	1
893	1	6204.595791	6323.442320	118.846529	1

Table 18: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
892	1	6196.870994	6315.533826	118.662832	1
891	1	6189.681742	6308.162614	118.480872	3
890	1	6182.615707	6300.903543	118.287835	1
889	1	6173.769778	6291.887710	118.117931	1
888	1	6165.973161	6283.878319	117.905158	3
887	1	6158.248389	6275.969721	117.721332	1
886	1	6151.059154	6268.598027	117.538873	3
885	1	6143.993135	6261.338978	117.345843	1
884	1	6135.147333	6252.323028	117.175695	1
883	1	6126.142214	6244.427426	118.285212	35
882	1	6119.076185	6237.168391	118.092205	1
881	1	6111.533654	6229.505624	117.971970	5
880	1	6104.467596	6222.246563	117.778967	1
879	1	6097.401577	6214.987544	117.585966	1
878	1	6089.859404	6207.324053	117.464650	5
877	1	6082.793356	6200.065009	117.271653	1
876	1	6075.727347	6192.806006	117.078659	1
875	1	6067.754177	6184.703843	116.949667	1
874	1	6059.949893	6176.732121	116.782228	1
873	1	6051.980095	6168.630532	116.650437	1
872	1	6044.631522	6161.282869	116.651347	3
871	1	6036.900670	6153.387416	116.486746	1
870	1	6029.170269	6145.491276	116.321007	1
869	1	6021.207242	6137.389533	116.182291	1
868	1	6014.091772	6129.908389	115.816617	9
867	1	6005.820118	6121.863695	116.043577	11
866	1	5998.304229	6114.031451	115.727222	7
865	1	5991.075351	6106.601284	115.525934	7
864	1	5983.345427	6098.704534	115.359107	1
863	1	5975.623916	6091.408213	115.784297	23
862	1	5968.557897	6084.149283	115.591385	1
861	1	5961.491919	6076.890393	115.398475	1
860	1	5953.950674	6069.226173	115.275498	5
859	1	5946.884666	6061.967261	115.082595	1
858	1	5939.818697	6054.708390	114.889693	1
857	1	5932.277458	6047.043737	114.766279	5
856	1	5925.211460	6039.784843	114.573384	1
855	1	5918.145501	6032.525990	114.380490	1
854	1	5910.173165	6024.423236	114.250070	1
853	1	5902.387568	6016.456651	114.069084	3
852	1	5894.633819	6008.497839	113.864020	3
851	1	5887.070438	6000.993302	113.922865	5
850	1	5879.698107	5993.301055	113.602949	7
849	1	5872.498281	5985.898651	113.400371	1
848	1	5864.530113	5977.796569	113.266456	1
847	1	5856.668546	5969.960883	113.292337	3
846	1	5849.486591	5962.578501	113.091910	7
845	1	5841.756965	5954.680186	112.923221	7
844	1	5834.051674	5946.673717	112.622043	9
843	1	5826.852198	5939.271635	112.419437	1
842	1	5818.746032	5931.353202	112.607169	13
841	1	5811.014948	5923.823608	112.808661	23
840	1	5803.949019	5916.564882	112.615863	1
839	1	5796.407993	5908.894773	112.486780	5
838	1	5789.342198	5901.636273	112.294075	7
837	1	5782.276279	5894.377564	112.101285	1
836	1	5774.735034	5886.706637	111.971603	5
835	1	5767.669481	5879.448440	111.778959	1
834	1	5760.603572	5872.189749	111.586176	1
833	1	5752.877886	5864.257422	111.379536	1
832	1	5745.136150	5856.444416	111.308266	5
831	1	5738.070245	5849.185743	111.115498	1
830	1	5730.917342	5841.836126	110.918784	1
829	1	5722.945480	5833.731091	110.785611	1
828	1	5715.044003	5825.829051	110.785049	5
827	1	5707.908971	5818.502232	110.593261	1
826	1	5700.179597	5810.600094	110.420498	1
825	1	5692.472470	5802.605436	110.132967	9
824	1	5685.273522	5795.202927	109.929405	11
823	2	5640.540570	5787.452061	146.911491	1201
822	2	5633.043473	5779.768096	146.724623	1
821	2	5625.467608	5772.084288	146.616680	3
820	2	5618.007058	5764.577273	146.570215	5
819	2	5611.094122	5757.354578	146.260456	9
818	2	5603.444963	5749.670074	146.225111	7
817	1	5632.704578	5742.081610	109.377032	1087
816	2	5588.560634	5734.477393	145.916758	1091
815	2	5581.495638	5727.254474	145.758836	17
814	1	5611.035654	5719.889178	108.853524	1087
813	1	5603.539800	5712.251749	108.711950	5
812	1	5596.473942	5704.993260	108.519318	1
811	1	5589.367962	5697.697979	108.330017	1
810	1	5580.973034	5689.923053	108.950019	23
809	1	5573.906800	5682.669719	108.762919	1
808	1	5567.044096	5675.681568	108.637472	3
807	1	5559.977956	5668.428355	108.450399	1
806	1	5553.115169	5661.439825	108.324656	3
805	1	5546.049123	5654.186734	108.137611	1
804	1	5538.984456	5646.930187	107.945731	1
803	1	5531.919829	5639.673682	107.753853	1
802	1	5524.855204	5632.417178	107.561974	1
801	1	5517.790581	5625.160676	107.370095	1
800	1	5510.725997	5617.904215	107.178218	1
799	1	5503.660170	5610.645858	106.985688	1
798	1	5495.701333	5602.537500	106.836167	1
797	1	5487.904229	5594.570648	106.666419	1
796	1	5480.152640	5586.607063	106.454423	3
795	1	5472.607848	5579.086419	106.478571	5
794	1	5465.217433	5571.405561	106.188127	7
793	1	5458.019144	5564.001405	105.982261	1
792	1	5450.064475	5555.893926	105.829451	1
791	1	5442.209306	5548.042380	105.833074	3
790	1	5435.028887	5540.657899	105.629012	1
789	1	5427.306056	5532.765423	105.459367	7
788	1	5419.553258	5524.788962	105.235704	7
787	1	5412.385742	5517.353762	104.968019	5
786	1	5404.631761	5509.611098	104.979336	3
785	1	5397.451747	5502.226799	104.775051	1

Table 19: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
784	1	5389.030236	5494.160631	105.130395	23
783	1	5381.965653	5486.904329	104.938676	1
782	1	5374.901110	5479.648067	104.746957	1
781	1	5367.835486	5472.390187	104.554701	1
780	1	5360.293437	5464.707535	104.414099	5
779	1	5353.228903	5457.451291	104.222387	1
778	1	5346.163522	5450.193696	104.030174	1
777	1	5338.439371	5442.257421	103.818049	1
776	1	5330.698224	5434.438365	103.740140	5
775	1	5323.632860	5427.180826	103.547966	7
774	1	5316.481493	5419.829556	103.348062	7
773	1	5308.757594	5411.893332	103.135739	7
772	1	5301.102403	5404.167708	103.065305	5
771	1	5293.951170	5396.816491	102.865322	1
770	1	5286.800054	5389.465326	102.665272	1
769	1	5278.845753	5381.353744	102.507991	1
768	1	5270.964299	5373.460266	102.495967	3
767	1	5263.813226	5366.108742	102.295517	1
766	1	5256.090660	5358.212959	102.122299	7
765	1	5248.338065	5350.233771	101.895705	1
764	1	5241.159607	5342.800525	101.640918	11
763	1	5233.416762	5335.050154	101.633392	13
762	2	5192.475873	5327.706748	135.230876	991
761	2	5185.411783	5320.483317	135.071534	1
760	2	5177.786537	5312.718230	134.931693	1
759	2	5170.963727	5305.477507	134.513780	5
758	2	5163.717919	5298.253262	134.535343	1
757	2	5156.051225	5290.488239	134.437014	5
756	2	5149.151492	5283.248304	134.096812	3
755	2	5141.905696	5276.024042	134.118346	1
754	2	5134.043399	5267.902856	133.859456	1
753	1	5159.513844	5260.486552	100.972708	983
752	1	5161.506224	5253.376181	91.869957	7
751	1	5145.585437	5246.240920	100.655483	5
750	1	5147.577647	5239.131663	91.554015	3
749	1	5131.657036	5231.995215	100.338179	1
748	1	5124.592416	5224.742084	100.149668	1
747	1	5117.527914	5217.489081	99.961167	1
746	1	5110.464308	5210.234680	99.770372	1
745	1	5103.400704	5202.980280	99.579576	1
744	1	5096.336252	5195.724475	99.388223	1
743	1	5089.271840	5188.468706	99.196866	1
742	1	5081.548598	5180.529718	98.981120	1
741	1	5073.807488	5172.706364	98.898876	5
740	1	5066.743092	5165.450663	98.707570	1
739	1	5059.592635	5158.098279	98.505644	1
738	1	5051.869411	5150.158874	98.289462	1
737	1	5044.214370	5142.432052	98.217683	5
736	1	5037.063924	5135.079541	98.015617	1
735	1	5029.913485	5127.726976	97.813491	1
734	1	5021.959308	5119.611670	97.652362	1
733	1	5014.077620	5111.708608	97.630988	3
732	1	5006.927194	5104.355782	97.428588	7
731	1	4999.204735	5096.457618	97.252882	7

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
730	1	4991.452265	5088.472966	97.020701	9
729	1	4984.281993	5081.042333	96.760340	5
728	1	4976.531159	5073.284623	96.753464	13
727	1	4969.351473	5065.896282	96.544809	15
726	1	4960.988873	5057.800861	96.811988	31
725	1	4953.925068	5050.546387	96.621319	1
724	1	4946.860866	5043.291232	96.430366	27
723	1	4939.757131	5035.994450	96.237319	27
722	1	4932.258457	5028.346115	96.087658	5
721	1	4925.194497	5021.091222	95.896725	25
720	1	4918.090962	5013.794518	95.703556	25
719	1	4910.264293	5005.931540	95.667246	3
718	1	4903.191938	4998.669249	95.477311	21
717	1	4904.651693	4991.660582	87.008890	19
716	1	4888.736052	4984.410587	95.674535	1
715	1	4890.723551	4977.414567	86.691016	3
714	1	4874.808087	4970.163701	95.355613	1
713	1	4876.595698	4962.912199	86.316501	3
712	1	4869.531949	4955.661206	86.129257	1
711	1	4862.468373	4948.407145	85.938772	1
710	1	4855.404837	4941.153121	85.748283	1
709	1	4848.341341	4933.899132	85.557791	1
708	1	4832.426516	4926.642617	94.216101	1
707	1	4824.703394	4918.698384	93.994991	1
706	1	4825.812477	4910.881054	85.068576	5
705	1	4809.898060	4903.616305	93.718246	1
704	1	4802.747721	4896.261781	93.514060	1
703	1	4795.024622	4888.317218	93.292596	1
702	1	4787.369654	4880.589099	93.219445	5
701	1	4780.219332	4873.234479	93.015147	1
700	1	4773.069017	4865.879825	92.810807	1
699	1	4765.345942	4857.934939	92.588997	1
698	1	4757.690995	4850.206297	92.515302	5
697	1	4750.540697	4842.851550	92.310853	1
696	1	4743.390405	4835.496768	92.106363	1
695	1	4735.436565	4827.378185	91.941620	1
694	1	4727.555156	4819.465378	91.910223	5
693	1	4720.404874	4812.110308	91.705434	7
692	1	4712.682769	4804.209895	91.527126	1
691	2	4675.388705	4796.534940	121.146236	867
690	1	4697.586809	4788.862655	91.275846	855
689	2	4660.828876	4781.514121	120.685245	853
688	2	4653.582022	4774.294327	120.712305	1
687	2	4646.090604	4766.617576	120.526972	7
686	2	4639.141762	4759.274013	120.132251	11
685	2	4631.777085	4752.053386	120.276300	7
684	2	4624.325526	4744.376499	120.050973	7
683	2	4617.153120	4737.032869	119.879749	5
682	2	4610.088815	4729.812239	119.723424	1
681	1	4640.738475	4722.557903	81.819428	845
680	1	4633.873790	4715.562864	81.689074	3
679	1	4626.810599	4708.311551	81.500951	1
678	1	4619.747526	4701.060363	81.312837	1
677	1	4612.684952	4693.808242	81.123290	1

Table 20: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
676	1	4605.622417	4686.556156	80.933739	1
675	1	4598.558789	4679.303997	80.745207	1
674	1	4591.495168	4672.051833	80.556665	1
673	1	4575.585597	4664.692986	89.107389	1
672	1	4567.862777	4656.743036	88.880259	1
671	1	4568.967545	4649.022423	80.054878	5
670	1	4561.817349	4641.668692	79.851343	7
669	1	4545.908345	4634.299877	88.391532	9
668	1	4538.186248	4626.349994	88.163746	1
667	1	4539.295837	4618.644337	79.348500	5
666	1	4532.146364	4611.291368	79.145003	1
665	1	4516.237926	4603.912775	87.674849	1
664	2	4479.879176	4596.197823	116.318647	831
663	2	4472.515260	4588.975495	116.460234	7
662	2	4464.969689	4581.205775	116.236086	1
661	2	4458.074424	4573.952330	115.877906	5
660	2	4450.828707	4566.730001	115.901294	7
659	2	4443.283153	4558.959717	115.676564	5
658	2	4436.387581	4551.706161	115.318579	3
657	2	4429.024024	4544.483116	115.459092	7
656	2	4421.519974	4536.712799	115.192825	5
655	2	4414.583100	4529.460139	114.877039	3
654	2	4407.337742	4522.237084	114.899342	1
653	2	4399.389090	4514.127901	114.738811	1
652	2	4391.620860	4506.152061	114.531201	1
651	2	4384.707146	4498.828911	114.121765	5
650	2	4376.990536	4490.882106	113.891569	1
649	1	4406.629243	4483.231116	76.601873	797
648	1	4390.723235	4475.807040	85.083805	1
647	1	4391.730943	4468.096464	76.365520	3
646	1	4384.371622	4461.078058	76.706436	19
645	1	4377.309873	4453.827853	76.517980	1
644	1	4370.448463	4446.837306	76.388843	3
643	1	4363.386895	4439.587263	76.200368	1
642	1	4356.324533	4432.336003	76.011470	1
641	1	4349.261582	4425.083803	75.822221	1
640	1	4342.198749	4417.831733	75.632984	1
639	1	4335.135493	4410.578935	75.443443	1
638	1	4328.072243	4403.326136	75.253893	1
637	1	4320.969630	4396.029728	75.060098	1
636	1	4305.065613	4388.569826	83.504213	1
635	1	4306.073719	4380.895395	74.821676	3
634	1	4290.170070	4373.428774	83.258705	1
633	1	4291.122144	4366.074217	74.952073	19
632	1	4284.782012	4359.590022	74.808010	1
631	1	4277.720957	4352.341083	74.620126	1
630	1	4270.658724	4345.089534	74.430809	1
629	1	4263.595816	4337.836978	74.241162	1
628	1	4256.533026	4330.584553	74.051527	1
627	1	4249.470243	4323.332127	73.861884	1
626	1	4242.407466	4316.079701	73.672235	1
625	1	4235.344807	4308.827405	73.482598	1
624	1	4219.442780	4301.333497	81.890717	1
623	1	4211.720320	4293.374481	81.654161	1

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
622	1	4212.818660	4285.785595	72.966935	5
621	1	4205.668824	4278.428797	72.759973	1
620	1	4189.767363	4270.926392	81.159029	1
619	1	4182.045625	4262.967594	80.921969	1
618	1	4183.148787	4255.392520	72.243733	5
617	1	4175.999673	4248.036524	72.036850	1
616	1	4160.098779	4240.525779	80.426999	1
615	1	4161.072959	4232.860448	71.787489	3
614	1	4145.172434	4225.342009	80.169575	1
613	1	4146.330756	4217.643274	71.312517	7
612	1	4130.430429	4210.124370	79.693941	1
611	1	4131.404469	4202.467061	71.062592	3
610	1	4115.504510	4194.940511	79.436001	5
609	1	4116.480722	4187.291689	70.810966	3
608	1	4100.581132	4179.757692	79.176561	1
607	1	4101.736213	4172.072641	70.336429	7
606	1	4085.836820	4164.538164	78.701344	1
605	1	4086.812572	4156.896269	70.083698	3
604	1	4079.261858	4149.486406	70.224548	45
603	1	4072.198969	4142.233179	70.034210	1
602	1	4065.136086	4134.979952	69.843866	1
601	1	4058.073210	4127.726727	69.653517	1
600	1	4050.970757	4120.428618	69.457862	1
599	1	4043.868310	4113.130489	69.262179	1
598	1	4036.765870	4105.832339	69.066469	1
597	1	4020.867708	4098.273955	77.406247	1
596	1	4021.647351	4090.920981	69.273630	23
595	1	4014.793714	4083.948931	69.155218	3
594	1	4007.731603	4076.696662	68.965059	1
593	1	4000.669523	4069.444445	68.774922	1
592	1	3993.607561	4062.192358	68.584797	1
591	1	3986.545145	4054.939563	68.394418	1
590	1	3979.482735	4047.686770	68.204034	1
589	1	3972.420234	4040.433756	68.013522	1
588	1	3965.357411	4033.180253	67.822841	1
587	1	3958.255166	4025.881619	67.626453	1
586	1	3951.152926	4018.582963	67.430036	1
585	1	3935.256754	4010.990978	75.734224	1
584	1	3935.955170	4003.590347	67.635177	23
583	1	3929.247892	3996.736300	67.488408	1
582	1	3922.540639	3989.882038	67.341399	1
581	1	3915.478575	3982.629525	67.150950	1
580	1	3908.416629	3975.377143	66.960513	1
579	1	3901.354713	3968.124799	66.770086	1
578	1	3894.292803	3960.872458	66.579654	1
577	1	3887.230453	3953.619403	66.388950	1
576	1	3880.168220	3946.366479	66.198259	1
575	1	3873.105879	3939.113424	66.007545	1
574	1	3866.043655	3931.860500	65.816845	1
573	1	3858.941629	3924.561134	65.619506	1
572	1	3851.839608	3917.261719	65.422110	1
571	5	3839.705722	3909.961214	70.255492	41
570	1	3837.107930	3902.741575	65.633645	23
569	1	3830.407630	3895.895147	65.487517	1

Table 21: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
568	1	3823.709861	3889.051094	65.341234	1
567	1	3816.647847	3881.798364	65.150517	1
566	1	3809.585951	3874.545764	64.959813	1
565	1	3802.524173	3867.293295	64.769122	1
564	5	3795.116425	3860.238707	65.122283	13
563	5	3788.439649	3853.287758	64.848109	1
562	1	3782.730387	3847.376685	64.646298	3
561	1	3777.819423	3842.393626	64.574203	1
560	1	3770.757437	3835.140762	64.383325	1
559	1	3763.695568	3827.888028	64.192460	1
558	1	3756.633818	3820.635426	64.001608	1
557	1	3749.572074	3813.382827	63.810753	1
556	1	3742.510336	3806.130232	63.619895	1
555	1	3735.448717	3798.877768	63.429050	1
554	1	3728.386989	3791.625175	63.238186	1
553	1	3721.325379	3784.372712	63.047334	1
552	1	3714.263775	3777.120254	62.856479	1
551	1	3707.202178	3769.867800	62.665621	1
550	1	3700.140700	3762.615476	62.474777	1
549	1	3693.079339	3755.363284	62.283945	1
548	1	3677.189367	3747.679419	70.490053	1
547	1	3668.377049	3738.680646	70.303597	1
546	1	3660.558832	3730.692217	70.133385	1
545	1	3661.549412	3723.174136	61.624724	5
544	1	3654.488069	3715.921811	61.433742	1
543	1	3638.599528	3708.210901	69.611373	1
542	1	3629.764001	3699.227269	69.463268	1
541	1	3630.147093	3691.070873	60.923780	5
540	1	3622.967724	3683.741345	60.773621	3
539	1	3615.906427	3676.488957	60.582530	1
538	1	3607.112108	3667.569346	60.457238	1
537	1	3599.311889	3659.706286	60.394397	1
536	1	3591.572622	3651.645144	60.072523	5
535	1	3584.395665	3644.316423	59.920758	3
534	1	3577.334415	3637.063978	59.729564	1
533	1	3567.755933	3628.252883	60.496950	23
532	1	3560.694566	3620.999928	60.305362	1
531	1	3553.633317	3613.747101	60.113784	1
530	1	3546.100926	3606.138371	60.037445	5
529	1	3539.039591	3598.885418	59.845827	1
528	1	3531.978353	3591.632543	59.654191	1
527	1	3524.447114	3584.021780	59.574666	5
526	1	3517.385789	3576.768781	59.382991	1
525	1	3510.324583	3569.515910	59.191328	1
524	1	3502.794474	3561.903096	59.108622	5
523	1	3495.733182	3554.650103	58.916921	1
522	1	3488.672008	3547.397239	58.725231	1
521	1	3480.712469	3539.331418	58.618950	1
520	1	3472.791168	3531.446857	58.655689	3
519	1	3465.730012	3524.193917	58.463905	1
518	1	3458.014162	3516.340448	58.326286	1
517	1	3450.222697	3508.938736	58.716039	15
516	1	3443.161693	3501.685912	58.524219	1
515	1	3436.100696	3494.433094	58.332398	1

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
514	1	3429.039452	3487.179880	58.140429	1
513	1	3421.978326	3479.926793	57.948467	1
512	1	3414.449890	3472.314244	57.864354	5
511	1	3407.388678	3465.061048	57.672370	1
510	1	3400.327585	3457.807978	57.480394	1
509	1	3392.799163	3450.193949	57.394787	5
508	1	3385.737983	3442.940773	57.202790	1
507	1	3378.676922	3435.687722	57.010800	1
506	1	3370.719156	3427.621193	56.902037	1
505	1	3362.815204	3419.730528	56.915323	3
504	1	3355.754161	3412.477434	56.723273	1
503	1	3348.044682	3404.627600	56.582918	1
502	1	3340.259486	3397.196422	56.936937	15
501	1	3333.200659	3389.946441	56.745782	1
500	1	3326.139753	3382.693487	56.553734	1
499	1	3319.078965	3375.440662	56.361698	1
498	1	3312.017951	3368.187444	56.169493	1
497	1	3304.489924	3360.564557	56.074633	5
496	1	3297.429168	3353.311762	55.882594	1
495	1	3290.368187	3346.058571	55.690383	1
494	1	3282.839389	3338.432495	55.593106	5
493	1	3275.779483	3331.180850	55.401367	1
492	1	3268.718534	3323.927687	55.209153	1
491	1	3260.999612	3316.048882	55.049270	1
490	1	3253.288591	3308.285790	54.997200	5
489	1	3246.227656	3301.032607	54.804951	1
488	1	3239.081518	3293.718435	54.636917	1
487	1	3231.338642	3285.966242	54.627601	3
486	1	3224.209993	3278.672947	54.462954	1
485	1	3216.571856	3271.723567	55.151712	31
484	1	3209.509134	3264.493944	54.984810	1
483	1	3202.655502	3257.513447	54.857945	3
482	1	3195.593069	3250.284319	54.691250	1
481	1	3188.739181	3243.302482	54.563300	3
480	1	3181.677038	3236.073847	54.396809	1
479	1	3174.823656	3229.090010	54.266354	3
478	1	3167.761801	3221.861849	54.100047	1
477	1	3160.908926	3214.876229	53.967303	3
476	1	3153.847360	3207.648521	53.801161	1
475	1	3146.994228	3200.661820	53.667591	3
474	1	3139.932952	3193.434565	53.501613	1
473	1	3132.875069	3186.185673	53.310604	1
472	1	3125.817305	3178.936910	53.119604	1
471	1	3118.759548	3171.688153	52.928605	1
470	1	3111.701796	3164.439402	52.737605	1
469	1	3104.644164	3157.190780	52.546616	1
468	1	3097.583389	3149.937648	52.354260	1
467	1	3089.639323	3141.864153	52.224831	1
466	1	3081.743494	3133.956743	52.213249	3
465	1	3074.682763	3126.703679	52.020915	1
464	1	3066.974516	3118.849641	51.875125	1
463	1	3059.268800	3110.995000	51.726199	1
462	1	3051.665441	3103.692087	52.026646	13
461	1	3044.605440	3096.465023	51.859583	1

Table 22: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
460	1	3037.549004	3089.218142	51.669138	1
459	1	3030.492575	3081.971267	51.478692	1
458	1	3023.434904	3074.722501	51.287596	1
457	1	3016.377352	3067.473860	51.096507	1
456	1	3009.317001	3060.221313	50.904312	1
455	1	3001.785917	3052.572975	50.787059	5
454	1	2994.728397	3045.324373	50.595976	1
453	1	2987.668895	3038.072927	50.404032	1
452	1	2979.953367	3030.187369	50.234003	1
451	1	2972.242624	3022.415641	50.173017	5
450	1	2965.183184	3015.164293	49.981109	1
449	1	2958.040440	3007.846605	49.806165	1
448	1	2950.313589	3000.081058	49.767470	3
447	1	2943.188333	2992.783729	49.595396	11
446	1	2935.630276	2985.461112	49.830836	15
445	1	2928.573948	2978.214367	49.640419	1
444	1	2921.516481	2970.965828	49.449347	1
443	1	2914.584533	2964.265503	49.680970	17
442	1	2907.525591	2957.035985	49.510394	1
441	1	2900.670065	2950.044086	49.374022	3
440	1	2893.611411	2942.814971	49.203560	1
439	1	2886.755616	2935.822327	49.066712	3
438	1	2879.698026	2928.593271	48.895244	5
437	1	2872.842008	2921.599324	48.757315	3
436	1	2865.783671	2914.370506	48.586834	1
435	1	2858.928421	2907.376080	48.447660	3
434	1	2851.870111	2900.147182	48.277071	1
433	1	2844.812253	2892.918777	48.106524	1
432	1	2837.756882	2885.673325	47.916443	1
431	1	2830.701518	2878.427881	47.726363	1
430	1	2823.644171	2871.179553	47.535382	1
429	1	2816.586943	2863.931336	47.344392	1
428	1	2808.873502	2856.041341	47.167839	1
427	1	2801.162262	2848.263899	47.101638	5
426	1	2794.105095	2841.015818	46.910723	1
425	1	2786.964438	2833.695861	46.731423	1
424	1	2779.236276	2825.919312	46.683037	3
423	1	2772.113108	2818.620347	46.507239	1
422	1	2764.369996	2810.822287	46.452291	3
421	1	2757.027147	2803.561840	46.534694	15
420	1	2749.970208	2796.332973	46.362764	1
419	1	2742.913081	2789.103123	46.190042	1
418	1	2735.957333	2782.294096	46.336763	15
417	1	2729.623061	2775.814039	46.190977	1
416	1	2722.566056	2768.583578	46.017522	1
415	1	2715.710253	2761.589267	45.879014	3
414	1	2708.653537	2754.359151	45.705614	1
413	1	2701.797511	2747.363773	45.566262	3
412	1	2694.740823	2740.133627	45.392804	1
411	1	2687.884836	2733.137602	45.252766	3
410	1	2680.828176	2725.907425	45.079249	1
409	1	2673.771966	2718.677731	44.905765	1
408	1	2666.716207	2711.448516	44.732309	1
407	1	2659.661017	2704.203479	44.542463	1
406	1	2652.605944	2696.958552	44.352608	1
405	1	2645.550990	2689.713734	44.162745	1
404	1	2637.837823	2681.814373	43.976550	1
403	1	2630.124666	2674.029018	43.904352	5
402	1	2623.069773	2666.784339	43.714566	1
401	1	2615.929390	2659.459309	43.529918	1
400	1	2608.201551	2651.675335	43.473783	3
399	1	2601.078657	2644.371470	43.292813	5
398	1	2593.335869	2636.566153	43.230283	3
397	1	2586.230465	2629.283637	43.053172	1
396	1	2578.931626	2622.026782	43.095156	15
395	1	2571.876147	2614.796092	42.919944	1
394	1	2564.820539	2607.564869	42.744331	17
393	1	2557.766809	2600.322076	42.555267	1
392	1	2551.004763	2593.731432	42.726668	15
391	1	2544.671625	2587.251965	42.580340	1
390	1	2537.616558	2580.021240	42.404682	1
389	1	2530.759464	2573.024522	42.265058	3
388	1	2523.704424	2565.793770	42.089345	1
387	1	2516.847400	2558.796497	41.949097	3
386	1	2509.792388	2551.565720	41.773333	1
385	1	2502.737827	2544.335413	41.597587	1
384	1	2495.682322	2537.103074	41.420752	1
383	1	2488.626842	2529.870662	41.243821	1
382	1	2481.574043	2522.629194	41.055151	1
381	1	2474.521363	2515.387833	40.866471	1
380	1	2466.808870	2507.480023	40.671153	1
379	1	2459.095741	2499.684891	40.589150	5
378	1	2452.043122	2492.443691	40.400569	1
377	1	2444.903414	2485.115011	40.211597	1
376	1	2437.199711	2477.339088	40.139377	3
375	1	2430.077492	2470.032175	39.954683	1
374	1	2422.728585	2462.567918	39.839333	3
373	1	2415.607141	2455.261852	39.654711	1
372	1	2408.376257	2448.145557	39.769300	13
371	1	2401.322711	2440.915149	39.592438	1
370	1	2394.268315	2433.683009	39.414694	1
369	1	2387.213555	2426.449891	39.236336	1
368	1	2380.088918	2419.406128	39.317210	15
367	1	2373.756078	2412.928006	39.171928	1
366	1	2367.058364	2406.102774	39.044410	1
365	1	2360.005041	2398.871608	38.866567	1
364	1	2353.157306	2391.887487	38.730182	3
363	1	2346.104010	2384.656316	38.552306	1
362	1	2339.260909	2377.676606	38.415697	3
361	1	2332.207641	2370.445427	38.237785	1
360	1	2325.153349	2363.212317	38.058969	1
359	1	2318.099507	2355.979723	37.880216	1
358	1	2310.838849	2348.782315	37.943466	7
357	1	2304.451242	2342.300677	37.849435	5
356	1	2298.118960	2335.824444	37.705484	1
355	1	2291.787129	2329.348216	37.561087	1
354	1	2284.734096	2322.116283	37.382186	1
353	1	2277.679887	2314.882331	37.202443	1

Table 23: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E*	-(E* -E^{MIF})	Adj
352	1	2270.626129	2307.648892	37.022763	1
351	1	2263.572396	2300.415404	36.843008	1
350	1	2256.518688	2293.181867	36.663179	1
349	1	2249.465430	2285.948844	36.483414	1
348	1	2242.416025	2278.712819	36.296794	1
347	1	2234.704330	2270.792335	36.088006	1
346	1	2226.994520	2262.986228	35.991708	5
345	1	2219.941303	2255.752944	35.811641	1
344	1	2212.802392	2248.419339	35.616947	1
343	1	2205.099362	2240.629347	35.529985	3
342	1	2197.977940	2233.317755	35.339815	1
341	1	2190.631024	2225.849333	35.218309	3
340	1	2183.340089	2218.615332	35.275244	13
339	1	2176.287220	2211.382035	35.094814	1
338	1	2169.234478	2204.148933	34.914456	1
337	5	2149.955703	2197.741651	47.785948	61
336	5	2142.902576	2190.508068	47.605492	1
335	5	2137.753526	2183.512126	45.758600	3
334	5	2130.700413	2176.278417	45.578003	5
333	5	2125.554212	2169.283670	43.729458	3
332	1	2128.239949	2162.436139	34.196190	47
331	1	2121.547006	2155.607546	34.060540	1
330	1	2114.494242	2148.373452	33.879209	1
329	1	2107.672594	2141.430727	33.758134	3
328	5	2091.695343	2134.488722	42.793378	39
327	5	2086.345213	2128.150926	41.805713	1
326	5	2079.292206	2120.916339	41.624133	1
325	5	2074.149991	2113.917005	39.767014	3
324	5	2067.097290	2106.682396	39.585106	1
323	1	2067.000774	2099.995344	32.994570	31
322	1	2060.311945	2093.169666	32.857721	1
321	1	2053.623257	2086.343410	32.720153	1
320	1	2046.570605	2079.108659	32.538054	1
319	1	2039.518404	2071.874428	32.356024	1
318	5	2028.271381	2064.797071	36.525689	23
317	5	2022.926151	2058.468188	35.542037	1
316	5	2017.582740	2052.140774	34.558034	1
315	1	2013.045245	2044.980920	31.935675	13
314	1	2006.371760	2038.173131	31.801371	1
313	1	1999.726918	2031.396713	31.669795	1
312	1	1993.110717	2024.652123	31.541407	1
311	1	1986.399461	2017.838110	31.438648	1
310	5	1980.786610	2012.098565	31.311955	3
309	1	1975.959254	2007.218985	31.259731	1
308	1	1968.906749	1999.983300	31.076551	1
307	1	1961.854695	1992.748134	30.893439	1
306	1	1954.803092	1985.513488	30.710396	1
305	1	1947.751514	1978.278824	30.527311	1
304	1	1940.699961	1971.044144	30.344183	1
303	1	1933.648858	1963.809983	30.161125	1
302	1	1926.597340	1956.575239	29.977899	1
301	1	1919.546272	1949.341015	29.794742	1
300	1	1912.495230	1942.106775	29.611545	1
299	1	1905.444212	1934.872520	29.428308	1

n	T	- E^{MIF}	- E*	-(E* -E^{MIF})	Adj
298	1	1898.393646	1927.638785	29.245140	1
297	1	1891.343530	1920.405571	29.062041	1
296	1	1882.550887	1911.461967	28.911080	1
295	1	1874.752345	1903.525774	28.773429	1
294	1	1867.054052	1895.687896	28.633843	1
293	1	1859.902111	1888.427400	28.525288	3
292	1	1852.852066	1881.193243	28.341177	1
291	1	1844.086525	1872.335299	28.248774	1
290	1	1836.329593	1864.509413	28.179820	1
289	1	1828.640014	1857.246000	28.605985	15
288	1	1821.590181	1850.010842	28.420662	1
287	1	1814.539448	1842.774084	28.234636	1
286	1	1807.489165	1835.537846	28.048681	1
285	1	1800.439333	1828.302131	27.862797	1
284	1	1792.939032	1820.787123	27.848091	5
283	1	1785.888890	1813.550736	27.661846	1
282	1	1778.319798	1806.565298	28.245501	15
281	1	1771.276824	1799.338553	28.061729	1
280	1	1764.429412	1792.417316	27.987904	3
279	1	1757.386493	1785.190407	27.803914	1
278	1	1750.344025	1777.964004	27.619979	1
277	1	1743.301140	1770.737074	27.435934	1
276	1	1736.258706	1763.510651	27.251945	1
275	1	1729.209231	1756.274006	27.064775	1
274	1	1722.159781	1749.037375	26.877594	1
273	1	1715.109863	1741.799810	26.689947	1
272	1	1708.060395	1734.562757	26.502362	1
271	1	1700.514961	1727.556298	27.041338	15
270	1	1693.475651	1720.333106	26.857456	5
269	1	1686.631238	1713.405225	26.773987	3
268	1	1679.592470	1706.182605	26.590135	1
267	1	1672.553224	1698.959265	26.406041	1
266	1	1665.511040	1691.731780	26.220740	1
265	1	1658.468881	1684.504305	26.035423	1
264	1	1651.419656	1677.266825	25.847170	1
263	1	1643.908390	1670.097576	26.189186	17
262	1	1636.816262	1662.887875	26.071613	1
261	1	1630.460154	1656.388419	25.928265	23
260	1	1623.421049	1649.164496	25.743447	1
259	1	1616.377673	1642.110092	25.732419	25
258	1	1610.763219	1636.390612	25.627392	1
257	1	1603.708683	1629.213139	25.504456	1
256	1	1596.879165	1622.245574	25.366409	3
255	1	1589.825777	1615.070412	25.244635	1
254	1	1582.995245	1608.097732	25.102487	3
253	1	1575.943006	1600.924857	24.981852	1
252	1	1569.118887	1593.947314	24.828427	3
251	1	1562.067796	1586.776382	24.708586	1
250	1	1555.238948	1579.794975	24.556027	3
249	1	1548.189006	1572.626135	24.437129	1
248	1	1541.362858	1565.641242	24.278384	3
247	1	1534.314064	1558.474329	24.160265	1
246	1	1527.275854	1551.250719	23.974865	1
245	1	1520.238095	1544.027626	23.789532	1

Table 24: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
244	1	1512.956517	1536.882829	23.926312	13
243	1	1505.908421	1529.712151	23.803729	1
242	1	1499.076971	1522.723264	23.646293	7
241	1	1492.030024	1515.554577	23.524553	1
240	1	1485.202483	1508.562918	23.360435	3
239	1	1478.156685	1501.396062	23.239377	1
238	2	1458.401342	1494.438248	36.036906	295
237	2	1451.355838	1487.236324	35.880485	1
236	2	1444.136501	1480.034329	35.897828	1
235	1	1450.218429	1473.095365	22.876936	273
234	1	1443.173666	1465.923516	22.749850	1
233	1	1436.340559	1458.930499	22.589940	3
232	1	1429.719290	1452.263306	22.544016	9
231	1	1423.401107	1445.811016	22.409909	1
230	1	1417.082949	1439.358239	22.275289	1
229	1	1410.038740	1432.183492	22.144752	1
228	1	1403.205405	1425.193032	21.987627	3
227	1	1396.162344	1418.020129	21.857784	1
226	1	1389.331708	1411.028063	21.696354	3
225	1	1382.289796	1403.856865	21.567068	1
224	1	1375.454585	1396.859048	21.404463	3
223	1	1368.412800	1389.687271	21.274470	1
222	1	1361.581309	1382.690887	21.109578	3
221	1	1354.539653	1375.518589	20.978936	1
220	1	1347.500528	1368.349193	20.848665	1
219	1	1340.483272	1361.365568	20.882297	17
218	1	1333.443544	1354.192036	20.748493	1
217	1	1326.660286	1347.250525	20.590239	3
216	1	1320.158515	1340.711237	20.552723	7
215	1	1313.840756	1334.258220	20.417464	1
214	1	1307.523043	1327.804472	20.281429	1
213	1	1301.205376	1321.349995	20.144619	1
212	1	1294.166257	1314.173556	20.007300	1
211	1	1287.333727	1307.181286	19.847559	3
210	1	1280.295756	1300.006412	19.710656	1
209	1	1273.462409	1293.010784	19.548374	3
208	1	1266.424566	1285.835602	19.411036	1
207	1	1259.591424	1278.838727	19.247303	3
206	1	1252.553709	1271.663247	19.109538	1
205	1	1245.518525	1264.490570	18.972045	1
204	1	1238.485872	1257.320613	18.834742	1
203	1	1231.456102	1250.106610	18.650509	1
202	1	1224.618358	1243.298618	18.680260	15
201	1	1217.583720	1236.124256	18.540537	1
200	1	1210.801268	1229.184776	18.383508	3
199	1	1204.292347	1222.627677	18.335330	7
198	1	1197.979031	1216.176003	18.196973	1
197	1	1191.663252	1209.721287	18.058035	1
196	1	1185.350005	1203.268658	17.918653	1
195	1	1178.315975	1196.092140	17.776166	1
194	1	1171.480383	1189.094682	17.614298	3
193	1	1164.446481	1181.917924	17.471443	1
192	2	1147.357058	1175.697144	28.340086	211
191	2	1140.313601	1168.499654	28.186052	1

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
190	2	1133.097035	1161.301939	28.204904	1
189	2	1125.783551	1153.637019	27.853468	5
188	2	1118.572796	1146.439107	27.866311	1
187	1	1122.743390	1139.455696	16.712305	201
186	1	1116.076450	1132.669966	16.593516	1
185	1	1109.046091	1125.493794	16.447704	1
184	1	1102.422710	1118.767663	16.344953	9
183	1	1096.108775	1112.315227	16.206453	1
182	1	1089.796282	1105.863712	16.067431	1
181	1	1083.483930	1099.411614	15.927684	1
180	1	1076.821821	1092.632624	15.810803	1
179	1	1069.792070	1085.454779	15.662709	1
178	5	1049.498537	1079.083854	29.585318	63
177	5	1043.485944	1072.614798	29.128855	1
176	1	1050.356342	1065.678130	15.321788	59
175	1	1044.045454	1059.229971	15.184517	1
174	1	1037.734707	1052.781192	15.046485	1
173	1	1031.426491	1046.334455	14.907964	1
172	1	1024.397403	1039.154907	14.757504	1
171	1	1017.367075	1031.971855	14.604780	1
170	1	1010.339278	1024.791797	14.452518	1
169	1	1003.311622	1017.611215	14.299593	1
168	5	987.367107	1010.726765	23.359659	51
167	5	980.337548	1003.545072	23.207524	1
166	5	974.519257	996.549774	22.030517	3
165	5	967.661743	990.405689	22.743946	5
164	5	962.265188	984.111386	21.846198	1
163	5	956.868740	977.816007	20.947267	1
162	5	949.839467	970.632016	20.792550	1
161	5	944.656735	963.733556	19.076822	3
160	5	938.062815	957.110858	19.048043	3
159	5	931.922786	951.091036	19.168251	3
158	5	926.528159	944.793386	18.265227	1
157	5	921.133763	938.494113	17.360350	1
156	5	914.105430	931.307705	17.202274	1
155	5	908.957589	924.445646	15.488057	3
154	1	905.577353	918.020913	12.443560	15
153	5	896.345363	911.707448	15.362085	13
152	5	890.961168	905.429627	14.468459	1
151	5	885.595913	899.181011	13.585099	1
150	1	881.326697	893.310258	11.983560	7
149	1	874.820750	886.693405	11.872655	1
148	1	869.308904	881.072971	11.764067	1
147	1	864.791158	876.461207	11.670049	1
146	1	857.763396	869.272573	11.509177	1
145	1	850.738164	862.087012	11.348849	1
144	1	843.715463	854.904499	11.189036	1
143	1	836.692904	847.721698	11.028794	1
142	1	829.670485	840.538610	10.868125	1
141	1	822.650598	833.358586	10.707987	1
140	1	815.628375	826.174676	10.546302	1
139	1	808.608682	818.993848	10.385166	1
138	1	801.589131	811.812780	10.223649	1
137	1	794.569721	804.631473	10.061752	1

Table 25: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
136	1	787.552841	797.453259	9.900418	1
135	1	780.538494	790.278120	9.739626	1
134	1	771.888084	782.206157	10.318073	13
133	1	764.872103	775.023203	10.151101	1
132	1	757.624997	768.042203	10.417206	7
131	1	752.079580	762.441558	10.361978	1
130	1	745.074713	755.271073	10.196360	1
129	1	738.279709	748.460647	10.180939	3
128	1	731.308859	741.332100	10.023241	1
127	1	724.482803	734.479629	9.996826	3
126	1	717.512263	727.349853	9.837590	1
125	1	711.424362	721.303235	9.878873	7
124	1	705.142336	714.920896	9.778560	1
123	1	698.182341	707.802109	9.619768	1
122	1	691.352363	700.939379	9.587016	3
121	1	684.392677	693.819577	9.426900	1
120	1	677.617362	687.021982	9.404619	5
119	1	672.090051	681.419158	9.329107	1
118	1	665.537834	674.769635	9.231801	1
117	1	659.162875	668.282701	9.119826	1
116	1	653.782018	662.809353	9.027335	1
115	1	646.746131	655.756307	9.010175	1
114	1	640.000618	648.833100	8.832482	3
113	1	632.971571	641.794704	8.823133	1
112	1	626.255287	634.874626	8.619339	3
111	1	619.538575	628.068416	8.529841	1
110	1	613.318206	621.788224	8.470018	5
109	1	607.045416	615.411166	8.365751	1
108	1	600.773449	609.033011	8.259562	1
107	1	593.759216	602.007110	8.247895	1
106	1	587.033279	595.061072	8.027793	3
105	1	580.334412	588.266501	7.932089	1
104	2	568.508947	582.086642	13.577695	143
103	2	562.265046	575.766131	13.501085	131
102	2	556.100851	569.363652	13.262801	1
101	1	555.880448	563.411308	7.530860	109
100	1	549.614026	557.039820	7.425793	1
99	1	543.347746	550.666526	7.318780	1
98	5	459.466678	543.665361	84.198682	61
97	1	529.610737	536.681383	7.070646	59
96	1	522.915049	529.879146	6.964098	1
95	1	516.759218	523.640211	6.880994	9
94	1	510.493659	517.264131	6.770472	1
93	1	504.224814	510.877688	6.652874	7
92	1	498.630804	505.185309	6.554505	5
91	1	492.365755	498.811060	6.445305	1
90	1	486.101025	492.433908	6.332883	1
89	1	479.836615	486.053911	6.217295	1
88	1	472.858084	479.032630	6.174546	1
87	1	466.141613	472.098165	5.956551	3
86	1	459.520844	465.384493	5.863650	7
85	5	442.461794	459.055799	16.594005	61
84	1	447.029435	452.657214	5.627779	59
83	1	441.399403	446.924094	5.524692	5

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
82	1	435.141809	440.550425	5.408616	1
81	5	418.751871	434.343643	15.591772	49
80	5	413.174252	428.083564	14.909313	1
79	5	407.599164	421.810897	14.211734	1
78	5	400.623898	414.794401	14.170503	1
77	2	399.485644	409.083517	9.597873	109
76	2	393.350121	402.894866	9.544745	1
75	2	388.190437	397.492331	9.301894	1
74	5	378.446458	390.908500	12.462042	101
73	5	373.082314	384.789377	11.707063	1
72	5	364.499634	378.637253	14.137620	3
71	5	362.311459	373.349661	11.038202	1
70	5	356.747752	366.892251	10.144500	1
69	5	349.799241	359.882566	10.083325	1
68	5	344.492689	353.394542	8.901853	5
67	5	338.297850	347.252007	8.954157	3
66	5	332.929651	341.110599	8.180948	1
65	5	327.471672	334.971532	7.499860	5
64	5	322.181399	329.620147	7.438749	3
63	5	316.828430	323.489734	6.661304	1
62	5	311.476582	317.353901	5.877319	1
61	5	306.189880	312.008896	5.819016	3
60	5	300.845135	305.875476	5.030340	1
59	5	295.504198	299.738070	4.233872	1
58	5	290.323295	294.378148	4.054853	3
57	5	285.036337	288.342625	3.306288	1
56	1	281.080918	283.643105	2.562187	3
55	1	276.790160	279.248470	2.458311	1
54	1	269.848550	272.208631	2.360081	1
53	1	262.935582	265.203016	2.267435	1
52	1	256.051255	258.229991	2.178736	1
51	1	249.168536	251.253964	2.085428	1
50	1	242.200014	244.549926	2.349912	3
49	1	236.765545	239.091864	2.326319	1
48	1	229.965239	232.199529	2.234290	1
47	1	223.683123	226.012256	2.329133	1
46	1	218.395108	220.680330	2.285222	1
45	1	211.606180	213.784862	2.178682	1
44	1	205.444733	207.688728	2.243995	1
43	1	200.177436	202.364664	2.187228	1
42	1	194.121809	196.277534	2.155724	1
41	1	188.430439	190.536277	2.105838	1
40	1	183.215073	185.249839	2.034766	1
39	1	178.099956	180.033185	1.933230	1
38	3	169.861663	173.928427	4.066764	77
37	1	165.169257	167.033672	1.864415	75
36	1	160.061341	161.825363	1.764021	1
35	1	154.037442	155.756643	1.719202	1
34	1	148.378752	150.044528	1.665777	3
33	1	143.278037	144.842719	1.564682	1
32	1	138.178929	139.635524	1.456595	1
31	1	132.177919	133.586422	1.408503	1
30	5	122.189006	128.286571	6.097565	29
29	5	117.754574	123.587371	5.832797	5

Table 26: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	T	- E^{MIF}	- E^*	-(E^* -E^{MIF})	Adj
28	5	111.743771	117.822402	6.078631	1
27	5	107.676832	112.873584	5.196752	1
26	5	103.329759	108.315616	4.985858	5
25	5	97.407732	102.372663	4.964931	1
24	5	93.391233	97.348815	3.957582	1
23	5	88.925087	92.844472	3.919385	1
22	5	84.331772	86.809782	2.478011	1
21	5	79.125778	81.684571	2.558793	1
20	5	74.676835	77.177043	2.500207	1
19	5	70.292142	72.659782	2.367641	1
18	5	65.765646	66.530949	0.765303	1
17	5	60.528902	61.317995	0.789092	3
16	5	56.232985	56.815742	0.582756	1
15	5	51.945217	52.322627	0.377411	1
14	5	47.721697	47.845157	0.123460	1
13	1	44.326801	44.326801	0.000000	1
12	1	37.877723	37.967600	0.089876	1
11	1	32.422747	32.765970	0.343224	1
10	1	27.961871	28.422532	0.460661	1
9	1	23.601244	24.113360	0.512117	1
8	1	19.340866	19.821489	0.480623	1
7	1	16.074589	16.505384	0.430795	1
6	5	9.257755	12.712062	3.454307	5
5	1	8.825643	9.103852	0.278209	3
4	1	5.798470	6.000000	0.201530	1
3	1	2.982303	3.000000	0.017697	1
2	1	0.994101	1.000000	0.005899	1

Max	0.005899	1201
Avrg	63.283163	17
Min	146.911491	1

Table 27: Results from MIF1739: type, initial, minimum, and difference of potential, and Adj(C_{n+1},C_n) (cont.).

n	On / T	Off / T
1000	2 3 4 5 6 7	/ 0
	8 9 10 11 12	
	13 14 15 16	
	17 18 19 20	
	21 22 23 24	
	25 26 27 28	
	29 30 31 32	
	33 34 35 36	
	37 38 39 40	
	41 42 43 44	
	45 46 47 48	
	49 50 51 52	
	53 54 55 76	
	77 78 79 80	
	81 82 83 84	
	85 86 87 88	
	89 90 91 92	
	93 94 95 96	
	97 98 99 100	
	101 102 103	
	104 105 106	
	107 108 109	
	110 111 112	
	113 114 115	
	116 117 118	
	119 120 121	
	122 123 124	
	125 126 127	
	128 129 130	
	131 132 133	
	134 135 136	
	137 138 139	
	140 141 142	
	143 144 145	
	146 147 148	
	149 150 151	
	152 153 154	
	155 156 157	
	158 159 160	
	161 162 163	
	164 165 166	
	167 228 229	
	230 231 232	
	233 234 235	
	236 237 238	
	239 240 241	
	242 243 244	
	245 246 247	
	248 249 250	
	251 252 253	
	254 255 256	
	257 258 259	
	260 261	
1000	262 263 264	
	265 266 267	
	268 269 270	
	271 272 273	
	274 275 276	
	277 278 279	
	280 281 282	
	283 284 285	
	286 287 288	
	289 290 291	
	292 293 294	
	295 296 297	
	298 299 300	
	301 302 303	
	304 305 306	
	307 308 309	
	310 311 312	
	313 314 315	
	316 317 318	
	319 320 321	
	322 323 324	
	325 326 327	
	328 329 330	
	331 332 333	
	334 335 336	
	337 338 339	
	340 341 342	
	343 344 345	
	346 347 348	
	349 350 351	
	352 353 354	
	355 356 357	
	358 359 360	
	361 362 363	
	364 365 366	
	367 368 369	
	370 371 372	
	373 374 375	
	376 377 378	
	379 380 381	
	382 383 384	
	385 386 387	
	388 389 510	
	511 512 513	
	514 515 516	
	517 518 519	
	520 521 522	
	523 524 525	
	526 527 528	
	529 530 531	
	532 533 534	
	535 536 537	
	538 539 540	
1000	541 542 543	
	544 545 546	
	547 548 549	
	550 551 552	
	553 554 555	
	556 557 558	
	559 560 561	
	562 563 564	
	565 566 567	
	568 569 570	
	571 572 573	
	574 575 576	
	577 578 579	
	580 581 582	
	583 584 585	
	586 587 588	
	589 590 591	
	592 593 594	
	595 596 597	
	598 599 600	
	601 602 603	
	604 605 606	
	607 608 609	
	610 611 612	
	613 614 615	
	616 617 618	
	619 620 621	
	622 623 624	
	625 626 627	
	628 629 630	
	631 632 633	
	634 635 636	
	637 638 639	
	640 641 642	
	643 644 645	
	646 647 648	
	649 650 651	
	652 653 654	
	655 656 657	
	658 659 660	
	661 662 663	
	664 665 666	
	667 668 669	
	670 671 672	
	673 674 675	
	676 677 678	
	679 680 681	
	682 683 684	
	685 686 687	
	688 689 690	
	691 692 693	
	694 695 696	
	697 698 699	

Table 28: i_p of the particles in MIF1739, to build C_n from C_{n+1}.

n	On / T	Off / T
1000	700 701 702	
	703 704 705	
	706 707 708	
	709 710 711	
	712 713 714	
	715 716 717	
	718 719 720	
	721 722 723	
	724 725 726	
	727 728 729	
	730 731 732	
	733 734 735	
	736 737 738	
	739 740 741	
	742 743 744	
	745 746 747	
	748 749 750	
	751 752 753	
	754 755 756	
	757 758 759	
	760 761 962	
	963 964 965	
	966 967 968	
	969 970 971	
	972 973 974	
	975 976 977	
	978 979 980	
	981 982 983	
	984 985 986	
	987 988 989	
	990 991 992	
	993 994 995	
	996 997 998	
	999 1000	
	1001 1002	
	1003 1004	
	1005 1006	
	1007 1008	
	1009 1010	
	1011 1012	
	1013 1014	
	1015 1016	
	1017 1018	
	1019 1020	
	1021 1022	
	1023 1024	
	1025 1026	
	1027 1028	
	1029 1030	
	1031 1032	
	1033 1034	
	1035 1036	
	1037 1039	

n	On / T	Off / T
1000	1040 1041	
	1042 1043	
	1045 1046	
	1047 1048	
	1049 1050	
	1051 1052	
	1053 1054	
	1055 1057	
	1058 1059	
	1060 1061	
	1063 1064	
	1065 1066	
	1067 1068	
	1069 1070	
	1071 1072	
	1073 1074	
	1075 1076	
	1077 1078	
	1079 1080	
	1081 1082	
	1083 1084	
	1085 1086	
	1087 1088	
	1089 1090	
	1091 1092	
	1093 1094	
	1095 1096	
	1097 1098	
	1099 1100	
	1101 1102	
	1103 1104	
	1105 1106	
	1107 1108	
	1109 1110	
	1111 1112	
	1113 1114	
	1115 1116	
	1117 1118	
	1119 1120	
	1121 1122	
	1123 1124	
	1125 1126	
	1127 1128	
	1129 1130	
	1131 1132	
	1133 1134	
	1135 1136	
	1137 1138	
	1139 1140	
	1141 1142	
	1143 1144	
	1145 1146	
	1147 1148	

n	On / T	Off / T
1000	1149 1150	
	1151 1152	
	1153 1154	
	1155 1156	
	1157 1158	
	1159 1160	
	1161 1162	
	1163 1164	
	1165 1166	
	1167 1168	
	1169 1170	
	1171 1172	
	1173 1174	
	1175 1176	
	1177 1178	
	1179 1180	
	1181 1182	
	1183 1184	
	1185 1186	
	1187 1188	
	1189 1190	
	1191 1192	
	1193 1194	
	1195 1196	
	1197 1198	
	1199 1200	
	1201 1202	
	1203 1204	
	1205 1206	
	1207 1208	
	1209 1210	
	1211 1212	
	1213 1214	
	1215 1216	
	1217 1219	
	1220 1221	
	1222 1223	
	1225 1226	
	1227 1228	
	1229 1231	
	1232 1233	
	1234 1235	
	1237 1238	
	1239 1240	
	1241 1243	
	1244 1245	
	1246 1247	
	1248 1249	
	1250 1251	
	1252 1253	
	1254 1255	
	1256 1257	
	1258 1259	

Table 29: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
1000	1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667	
1000	1668 1669 1670 1671 1672 1673 1674 1676 1677 1678 1679 1681 1682 1683 1684 1685 1686 1687 1688 1689 1691 1692 1693 1694 1696 1697 1698 1699 1702 1703 1704 1708 1709 1710 1711 1713 1714 1715 1716 1720 1721 1722 1726 1727 1728 / 1000	
999	/ 0	1050 / 1
998	1056 1062 / 2	1685 1711 1713 / 3
997	/ 0	1056 / 1
996	/ 0	1062 / 1
995	/ 0	1726 / 1
994	1050 / 1	1727 1728 / 2
993	/ 0	1050 / 1
992	/ 0	1702 / 1
991	1050 / 1	1703 1704 / 2
990	/ 0	1050 / 1
989	/ 0	1722 / 1
988	1050 1722 / 2	1655 1676 1699 / 3
987	/ 0	1050 / 1
986	/ 0	1708 / 1
985	1044 1050 1056 1062 1230 1685 1690 1708 1711 1713 1717 1719 1746 1747 1748 1749 1780 1781 1782 1783 1784 1815 1816 1817	1625 1626 1627 1628 1629 1630 1631 1632 1638 1639 1640 1641 1642 1643 1652 1653 1654 1656 1657 1658 1659 1671 1672 1673
985	1818 1850 1851 1852 1885 1886 / 30	1674 1677 1678 1679 1696 1697 1698 / 31
984	/ 0	1062 / 1
983	/ 0	1044 / 1
982	/ 0	1230 / 1
981	1062 / 1	1885 1886 / 2
980	/ 0	1062 / 1
979	1230 1885 1886 / 3	1681 1694 1708 1722 / 4
978	/ 0	1230 / 1
977	1062 / 1	1885 1886 / 2
976	/ 0	1062 / 1
975	/ 0	1637 / 1
974	1885 1886 / 2	1636 1651 1670 / 3
973	1636 1637 1651 1670 / 4	1633 1644 1660 1885 1886 / 5
972	1038 1044 1062 1218 1224 1230 1236 1242 1323 1840 1841 1874 1875 1876 1908 1909 1910 1911 1942 1943 1944 1945 1946 1977 1978 1979 1980 2011 2012 2013 2014 2015 2036 2037 2038 2039 2040 2041 2042 2043 2044 2061 2062 2063 2064 2065 2066 2067 2068 2082 2083 2084 2085 2086 2087 2098 2099 2100 2101 2109 / 60	1056 1634 1635 1636 1637 1645 1646 1647 1648 1649 1650 1651 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1709 1710 1711 1713 1714 1715 1716 1717 1719 1720 1721 1746 1747 1748 1749 1780 1781 1782 1783 1784 1815 1816 1817 1818 1850 1851

Table 30: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
972		1852 / 61
971	/ 0	1062 / 1
970	/ 0	962 / 1
969	/ 0	1050 / 1
968	/ 0	1236 / 1
967	/ 0	1230 / 1
966	/ 0	1038 / 1
965	/ 0	1242 / 1
964	/ 0	1044 / 1
963	962 1050 1056 1062 1635 1636 1637 1647 1648 1649 1650 1651 1664 1665 1666 1667 1668 1669 1670 1686 1687 1688 1689 1690 1691 1692 1693 1694 1713 1714 1715 1716 1717 1719 1720 1721 1722 1746 1747 1748 1749 1780 1781 1782 1783 1784 1815 1816 1817 1818 1850 1851 1852 / 53	1218 1224 1323 1840 1841 1874 1875 1876 1908 1909 1910 1911 1942 1943 1944 1945 1946 1977 1978 1979 1980 2011 2012 2013 2014 2015 2036 2037 2038 2039 2040 2041 2042 2043 2044 2061 2062 2063 2064 2065 2066 2067 2068 2082 2083 2084 2085 2086 2087 2098 2099 2100 2101 2109 / 54
962	/ 0	1062 / 1
961	1885 1886 / 2	1713 1746 1780 / 3
960	1713 1746 1780 / 3	1694 1722 1885 1886 / 4
959	1885 1886 / 2	1635 1636 1637 / 3
958	/ 0	962 / 1
957	962 / 1	1885 1886 / 2
956	/ 0	962 / 1
955	962 1694 1722 / 3	1050 1713 1746 1780 / 4
954	1050 1713	962 1651

n	On / T	Off / T
954	1746 1780 / 4	1670 1694 1722 / 5
953	962 1038 1044 1062 1218 1224 1230 1236 1323 1885 1886 / 11	1649 1650 1667 1668 1669 1690 1691 1692 1693 1719 1720 1721 / 12
952	/ 0	1218 / 1
951	/ 0	1038 / 1
950	/ 0	1323 / 1
949	/ 0	1236 / 1
948	/ 0	1062 / 1
947	/ 0	1044 / 1
946	/ 0	1224 / 1
945	/ 0	1230 / 1
944	/ 0	962 / 1
943	1230 / 1	1647 1648 / 2
942	/ 0	1230 / 1
941	1647 1648 / 2	1713 1746 1780 / 3
940	1713 1746 1780 / 3	1647 1648 1885 1886 / 4
939	1647 1648 / 2	1717 1749 1784 / 3
938	/ 0	1056 / 1
937	1056 / 1	1647 1648 / 2
936	/ 0	1056 / 1
935	1885 1886 / 2	1713 1746 1780 / 3
934	962 1038 1044 1056 1062 1218 1224 1230 1236 1242 1323 / 11	1664 1665 1666 1686 1687 1688 1689 1714 1715 1716 1747 1748 / 12
933	/ 0	1218 / 1
932	/ 0	1242 / 1
931	/ 0	1038 / 1
930	/ 0	1323 / 1
929	/ 0	1062 / 1
928	/ 0	1044 / 1
927	/ 0	1224 / 1
926	/ 0	962 / 1
925	/ 0	1236 / 1
924	/ 0	1056 / 1
923	1 962 1038 1044 1056	1781 1782 1783 1815

n	On / T	Off / T
923	1062 1218 1224 1236 1242 1323 / 11	1816 1817 1818 1850 1851 1852 1885 1886 / 12
922	/ 0	1 / 1
921	/ 0	1323 / 1
920	/ 0	1218 / 1
919	/ 0	1224 / 1
918	/ 0	1230 / 1
917	/ 0	1050 / 1
916	/ 0	1044 / 1
915	/ 0	1242 / 1
914	/ 0	1038 / 1
913	/ 0	1236 / 1
912	/ 0	1056 / 1
911	/ 0	1062 / 1
910	/ 0	962 / 1
909	/ 0	1195 / 1
908	/ 0	1225 / 1
907	/ 0	1194 / 1
906	1062 / 1	1223 1253 / 2
905	/ 0	1062 / 1
904	/ 0	1219 / 1
903	/ 0	1248 / 1
902	/ 0	1189 / 1
901	1062 / 1	1188 1247 / 2
900	/ 0	1062 / 1
899	/ 0	1073 / 1
898	/ 0	1074 / 1
897	/ 0	1045 / 1
896	1062 / 1	1018 1043 / 2
895	/ 0	1062 / 1
894	/ 0	1068 / 1
893	/ 0	1039 / 1
892	/ 0	1097 / 1
891	1236 / 1	1013 1067 / 2
890	/ 0	1236 / 1
889	/ 0	1042 / 1
888	1042 / 1	963 964 / 2
887	/ 0	965 / 1
886	1236 / 1	966 967 / 2
885	/ 0	1236 / 1
884	/ 0	997 / 1
883	965 966 967 1067 1068 1097 1188 1189 1194 1195 1219	968 969 970 978 979 980 981 993 994 995 996 1014 1015 1016

Table 31: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
883	1223 1225 1236 1247 1248 1253 / 17	1017 1040 1041 1042 / 18
882	/ 0	1236 / 1
881	1236 1323 / 2	965 966 967 / 3
880	/ 0	1323 / 1
879	/ 0	1236 / 1
878	1230 1323 / 2	1067 1068 1097 / 3
877	/ 0	1230 / 1
876	/ 0	1323 / 1
875	/ 0	1069 / 1
874	/ 0	1098 / 1
873	/ 0	1072 / 1
872	1098 / 1	1070 1071 / 2
871	/ 0	1102 / 1
870	/ 0	1098 / 1
869	/ 0	1019 / 1
868	1069 1070 1071 1098 / 4	566 1046 1075 1103 1104 / 5
867	566 1075 1102 1103 1104 / 5	971 982 998 1069 1070 1071 / 6
866	971 982 998 / 3	1075 1102 1103 1104 / 4
865	1069 1070 1071 / 3	566 971 982 998 / 4
864	/ 0	972 / 1
863	566 1067 1068 1072 1075 1097 1102 1103 1104 1236 1323 / 11	983 984 999 1000 1001 1020 1021 1022 1023 1047 1048 1049 / 12
862	/ 0	1323 / 1
861	/ 0	1236 / 1
860	1236 1323 / 2	1051 1079 1080 / 3
859	/ 0	1323 / 1
858	/ 0	1236 / 1
857	1236 1323 / 2	1067 1068 1097 / 3
856	/ 0	1236 / 1
855	/ 0	1323 / 1
854	/ 0	1037 / 1
853	1037 / 1	1072 1102 / 2
852	1102 / 1	566 1075 / 2

n	On / T	Off / T
851	566 1075 / 2	1069 1070 1071 / 3
850	1069 1070 1071 / 3	1075 1102 1103 1104 / 4
849	/ 0	566 / 1
848	/ 0	1069 / 1
847	566 / 1	1070 1071 / 2
846	1069 1070 1071 / 3	566 1076 1077 1078 / 4
845	1076 1077 1078 / 3	1069 1070 1071 1098 / 4
844	1069 1070 1071 1098 / 4	973 974 975 976 977 / 5
843	/ 0	510 / 1
842	510 973 974 975 976 977 / 6	1069 1070 1071 1076 1077 1078 1098 / 7
841	566 1051 1075 1076 1077 1078 1079 1080 1103 1104 1236 / 11	1099 1100 1101 1128 1129 1130 1131 1158 1159 1160 1188 1189 / 12
840	/ 0	1236 / 1
839	1236 1323 / 2	1051 1079 1080 / 3
838	1051 1079 1080 / 3	1219 1247 1248 1323 / 4
837	/ 0	1236 / 1
836	1236 1323 / 2	1051 1079 1080 / 3
835	/ 0	1323 / 1
834	/ 0	1236 / 1
833	/ 0	566 / 1
832	566 1236 / 2	1075 1103 1104 / 3
831	/ 0	1236 / 1
830	/ 0	566 / 1
829	/ 0	1217 / 1
828	566 1217 / 2	1076 1077 1078 / 3
827	/ 0	566 / 1
826	/ 0	1108 / 1
825	1076 1077 1078 1108 / 4	1037 1066 1096 1126

n	On / T	Off / T
825		1127 / 5
824	1037 1066 1096 1126 1127 / 5	510 973 974 975 976 977 / 6
823	510 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 993 994 995 996 997 998 999 1000 1001 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1039 1040 1041 1042 1046 1047 1048 1067 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341

Table 32: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
823	1680 1681	342 343 344
	1682 1683	345 346 347
	1684 1685	348 349 350
	1686 1687	351 352 353
	1688 1689	354 355 356
	1690 1691	357 358 359
	1692 1693	360 361 362
	1694 1695	363 364 365
	1696 1697	366 367 368
	1698 1699	369 370 371
	1701 1702	372 373 374
	1703 1704	375 376 377
	1705 1707	378 379 380
	1708 1709	381 382 383
	1710 1711	384 385 386
	1713 1714	387 388 389
	1715 1716	571 586 587
	1717 1719	588 589 590
	1720 1721	591 592 593
	1722 1723	594 595 596
	1724 1725	597 598 599
	1726 1727	600 601 602
	1728 1729	603 604 605
	1753 1754	606 607 608
	1755 1756	609 610 611
	1760 1761	612 613 614
	1762 1763	615 616 617
	2536 2537	618 619 620
	2538 2539	621 622 623
	2540 2541	624 625 626
	2542 2543	627 628 629
	2544 2545	630 631 632
	2546 2547	633 634 635
	2548 2549	636 637 638
	2550 2551	639 640 641
	2552 2553	642 643 644
	2554 2555	645 646 647
	2556 2557	648 649 650
	2558 2559	651 652 653
	2560 2561	654 655 656
	2562 2563	657 658 659
	2564 2565	660 661 662
	2566 2567	663 664 665
	2568 2569	666 667 668
	2570 2571	669 670 671
	2572 2573	672 673 674
	2574 2575	675 676 677
	2576 2577	678 679 680
	2578 2579	681 682 683
	2580 2581	684 685 686
	2582 2583	687 688 689
	2584 2585	690 691 692
	2586 2587	693 694 695

n	On / T	Off / T
823	2588 2589	696 697 698
	2590 2591	699 700 701
	2592 2593	702 703 704
	2594 2595	705 706 707
	2596 2597	708 709 710
	2598 2599	711 712 713
	2600 2601	714 715 716
	2602 2603	717 718 719
	2604 2605	720 721 722
	2606 2607	723 724 725
	2608 2609	726 727 728
	2610 2611	729 730 731
	2613 2614	732 733 734
	2615 2616	735 736 737
	2617 2619	738 739 740
	2620 2621	741 742 743
	2622 2623	744 745 746
	2625 2626	747 748 749
	2627 2628	750 751 752
	2629 2631	753 754 755
	2632 2633	756 757 758
	2634 2635	759 760 761
	2636 2637	1076 1077
	2638 2639	1078 1081
	2640 2641	1082 1083
	2665 2666	1084 1085
	2667 2668	1086 1087
	2669 2671	1088 1089
	2672 2673	1090 1091
	2674 2675	1092 1093
	3738 3739	1094 1095
	3740 3741	1096 1105
	3742 3743	1106 1107
	3744 3745	1108 1109
	3746 3747	1110 1111
	3748 3749	1112 1113
	3750 3751	1114 1115
	3752 3753	1116 1117
	3754 3755	1118 1119
	3756 3757	1120 1121
	3758 3759	1122 1123
	3760 3761	1124 1125
	3762 3763	1126 1127
	3764 3765	1132 1133
	3766 3767	1134 1135
	3768 3769	1136 1137
	3770 3771	1138 1139
	3772 3773	1140 1141
	3774 3775	1142 1143
	3776 3777	1144 1145
	3778 3779	1146 1147
	3780 3781	1148 1149
	3782 3783	1150 1151

n	On / T	Off / T
823	3784 3785	1152 1153
	3786 3787	1154 1155
	3788 3789	1156 1157
	3790 3791	1161 1162
	3792 3793	1163 1164
	3794 3795	1165 1166
	3796 3797	1167 1168
	3798 3799	1169 1170
	3800 3801	1171 1172
	3802 3803	1173 1174
	3804 3805	1175 1176
	3806 3807	1177 1178
	3808 3809	1179 1180
	3810 3811	1181 1182
	3812 3813	1183 1184
	3815 3816	1185 1186
	3817 3818	1187 1190
	3819 3821	1191 1192
	3822 3823	1193 1194
	3824 3825	1195 1196
	3827 3828	1197 1198
	3829 3830	1199 1200
	3831 3833	1201 1202
	3834 3835	1203 1204
	3836 3837	1205 1206
	3838 3839	1207 1208
	3840 3841	1209 1210
	3842 3843	1211 1212
	3867 3868	1213 1214
	3869 3870	1215 1216
	3871 3873	1217 1220
	3874 3875	1221 1222
	3876 3877	1223 1225
	5270 5271	1226 1227
	5272 5273	1228 1229
	5274 5275	1231 1232
	5276 5277	1233 1234
	5278 5279	1235 1237
	5280 5281	1238 1239
	5282 5283	1240 1241
	5284 5285	1243 1244
	5286 5287	1245 1246
	5288 5289	1249 1250
	5290 5291	1251 1252
	5292 5293	1253 1254
	5294 5295	1255 1256
	5296 5297	1257 1258
	5298 5299	1259 1260
	5300 5301	1261 1262
	5302 5303	1263 1264
	5304 5305	1265 1266
	5306 5307	1267 1268
	5308 5309	1269 1270

Table 33: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
823	5310 5311 5312 5313 5314 5315 5316 5317 5318 5319 5320 5321 5322 5323 5324 5325 5326 5327 5328 5329 5330 5331 5332 5333 5334 5335 5336 5337 5338 5339 5340 5341 5342 5343 5344 5345 5347 5348 5349 5350 5351 5353 5354 5355 5356 5357 5359 5360 5361 5362 5363 5365 5366 5367 5368 5369 5370 5371 5372 5373 5374 5375 5399 5400 5401 5402 5403 5405 5406 5407 5408 5409 7173 7174 7175 7176 7177 7178 7179 7180 7181 7182 7183 7184 7185 7186 7187 7188 7189 7190 7191 7192 7193 7194 7195 7196 7197 7198 7199 7200 7201 7202 7203 7204 7205 7206	1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 / 601
823	7207 7208 7209 7210 7211 7212 7213 7214 7215 7216 7217 7218 7219 7220 7221 7222 7223 7224 7225 7226 7227 7229 7230 7231 7232 7234 7235 7236 7237 7238 7239 7240 7241 7242 7243 7244 7245 7246 7247 7249 7250 7251 7252 7256 7257 7258 7262 7263 7264 7265 7267 7268 7269 7270 7271 7273 7274 7275 7276 7277 7301 7302 7303 7304 7308 7309 7310 7311 / 600	
822	/ 0	1753 / 1
821	1753 / 1	1763 7301 / 2
820	1763 7172 / 2	7238 7265 7267 / 3
819	7238 7265 7267 7301 / 4	561 1039 1067 1763 7172 / 5
818	561 1039 1067 / 3	7238 7265 7267 7301 / 4
817	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52	962 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636
817	53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374	1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1701 1702 1703 1704 1705 1707 1708 1709 1710 1711 1713 1714 1715 1716 1717 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1753 1754 1755 1756 1760 1761 1762 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545

Table 34: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
817	375 376 377	2546 2547
	378 379 380	2548 2549
	381 382 383	2550 2551
	384 385 386	2552 2553
	387 388 389	2554 2555
	566 571 586	2556 2557
	587 588 589	2558 2559
	590 591 592	2560 2561
	593 594 595	2562 2563
	596 597 598	2564 2565
	599 600 601	2566 2567
	602 603 604	2568 2569
	605 606 607	2570 2571
	608 609 610	2572 2573
	611 612 613	2574 2575
	614 615 616	2576 2577
	617 618 619	2578 2579
	620 621 622	2580 2581
	623 624 625	2582 2583
	626 627 628	2584 2585
	629 630 631	2586 2587
	632 633 634	2588 2589
	635 636 637	2590 2591
	638 639 640	2592 2593
	641 642 643	2594 2595
	644 645 646	2596 2597
	647 648 649	2598 2599
	650 651 652	2600 2601
	653 654 655	2602 2603
	656 657 658	2604 2605
	659 660 661	2606 2607
	662 663 664	2608 2609
	665 666 667	2610 2611
	668 669 670	2613 2614
	671 672 673	2615 2616
	674 675 676	2617 2619
	677 678 679	2620 2621
	680 681 682	2622 2623
	683 684 685	2625 2626
	686 687 688	2627 2628
	689 690 691	2629 2631
	692 693 694	2632 2633
	695 697 698	2634 2635
	699 700 701	2636 2637
	702 703 704	2638 2639
	705 706 707	2640 2641
	708 709 710	2665 2666
	711 712 713	2667 2668
	714 715 716	2669 2671
	717 718 719	2672 2673
	720 721 722	2674 2675
	723 724 725	3738 3739
	726 727 728	3740 3741

n	On / T	Off / T
817	729 730 731	3742 3743
	732 733 734	3744 3745
	735 736 737	3746 3747
	738 739 740	3748 3749
	741 742 743	3750 3751
	744 745 746	3752 3753
	747 748 749	3754 3755
	750 751 752	3756 3757
	753 754 755	3758 3759
	756 757 758	3760 3761
	759 760 761	3762 3763
	1043 1045	3764 3765
	1049 1051	3766 3767
	1068 1069	3768 3769
	1070 1071	3770 3771
	1072 1073	3772 3773
	1074 1075	3774 3775
	1076 1077	3776 3777
	1078 1081	3778 3779
	1082 1083	3780 3781
	1084 1087	3782 3783
	1088 1089	3784 3785
	1090 1091	3786 3787
	1092 1093	3788 3789
	1094 1095	3790 3791
	1096 1097	3792 3793
	1098 1099	3794 3795
	1100 1101	3796 3797
	1102 1103	3798 3799
	1104 1105	3800 3801
	1106 1107	3802 3803
	1111 1112	3804 3805
	1113 1117	3806 3807
	1118 1119	3808 3809
	1120 1121	3810 3811
	1122 1123	3812 3813
	1124 1125	3815 3816
	1126 1127	3817 3818
	1128 1129	3819 3821
	1130 1131	3822 3823
	1132 1133	3824 3825
	1134 1135	3827 3828
	1136 1141	3829 3830
	1142 1147	3831 3833
	1148 1149	3834 3835
	1150 1151	3836 3837
	1152 1153	3838 3839
	1154 1155	3840 3841
	1156 1157	3842 3843
	1158 1159	3867 3868
	1160 1161	3869 3870
	1162 1163	3871 3873
	1164 1165	3874 3875

n	On / T	Off / T
817	1177 1178	3876 3877
	1179 1180	5270 5271
	1181 1182	5272 5273
	1183 1184	5274 5275
	1185 1186	5276 5277
	1187 1188	5278 5279
	1189 1190	5280 5281
	1191 1192	5282 5283
	1193 1208	5284 5285
	1209 1210	5286 5287
	1211 1212	5288 5289
	1213 1214	5290 5291
	1215 1216	5292 5293
	1217 1219	5294 5295
	1220 1221	5296 5297
	1222 1238	5298 5299
	1239 1240	5300 5301
	1241 1243	5302 5303
	1244 1245	5304 5305
	1246 1247	5306 5307
	1248 1249	5308 5309
	1250 1251	5310 5311
	1252 1264	5312 5313
	1265 1266	5314 5315
	1267 1268	5316 5317
	1269 1270	5318 5319
	1271 1272	5320 5321
	1273 1274	5322 5323
	1275 1276	5324 5325
	1286 1287	5326 5327
	1288 1289	5328 5329
	1290 1291	5330 5331
	1292 1293	5332 5333
	1294 1295	5334 5335
	1303 1304	5336 5337
	1305 1306	5338 5339
	1307 1308	5340 5341
	1309 1315	5342 5343
	1316 1317 /	5344 5345
	543	5347 5348
		5349 5350
		5351 5353
		5354 5355
		5356 5357
		5359 5360
		5361 5362
		5363 5365
		5366 5367
		5368 5369
		5370 5371
		5372 5373
		5374 5375
		5399 5400

Table 35: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
817		5401 5402
		5403 5405
		5406 5407
		5408 5409
		7173 7174
		7175 7176
		7177 7178
		7179 7180
		7181 7182
		7183 7184
		7185 7186
		7187 7188
		7189 7190
		7191 7192
		7193 7194
		7195 7196
		7197 7198
		7199 7200
		7201 7202
		7203 7204
		7205 7206
		7207 7208
		7209 7210
		7211 7212
		7213 7214
		7215 7216
		7217 7218
		7219 7220
		7221 7222
		7223 7224
		7225 7226
		7227 7229
		7230 7231
		7232 7234
		7235 7236
		7237 7239
		7240 7241
		7242 7243
		7244 7245
		7246 7247
		7249 7250
		7251 7252
		7256 7257
		7258 7262
		7263 7264
		7268 7269
		7270 7271
		7273 7274
		7275 7276
		7277 7302
		7303 7304
		7308 7309
		7310 7311 / 544

n	On / T	Off / T
816	962 1624	8 9 10 11 12
	1625 1626	13 30 31 32
	1627 1628	33 34 35 36
	1629 1630	37 38 39 40
	1631 1632	41 42 43 44
	1633 1634	45 46 47 48
	1635 1636	49 50 51 52
	1637 1638	53 54 55 107
	1639 1640	108 109 110
	1641 1642	111 112 113
	1643 1644	114 115 116
	1645 1646	117 118 119
	1647 1648	120 121 122
	1649 1650	123 124 125
	1651 1652	126 127 128
	1653 1654	129 130 131
	1655 1656	132 133 134
	1657 1658	135 136 137
	1659 1660	138 139 140
	1661 1662	141 142 143
	1663 1664	144 145 146
	1665 1666	147 148 149
	1667 1668	150 151 152
	1669 1670	153 154 155
	1671 1672	156 157 158
	1673 1674	159 160 161
	1675 1676	162 163 164
	1677 1678	165 166 167
	1679 1680	279 280 281
	1681 1682	282 283 284
	1683 1684	285 286 287
	1685 1686	288 289 290
	1687 1688	291 292 293
	1689 1690	294 295 296
	1691 1692	297 298 299
	1693 1694	300 301 302
	1695 1696	303 304 305
	1697 1698	306 307 308
	1699 1701	309 310 311
	1702 1703	312 313 314
	1704 1705	315 316 317
	1707 1708	318 319 320
	1709 1710	321 322 323
	1711 1713	324 325 326
	1714 1715	327 328 329
	1716 1717	330 331 332
	1718 1719	333 334 335
	1720 1721	336 337 338
	1722 1723	339 340 341
	1725 1726	342 343 344
	1727 1728	345 346 347
	1729 1746	348 349 350
	1747 1748	351 352 353

n	On / T	Off / T
816	1749 1753	354 355 356
	1754 1755	357 358 359
	2536 2537	360 361 362
	2538 2539	363 364 365
	2540 2541	366 367 368
	2542 2543	369 370 371
	2544 2545	372 373 374
	2546 2547	375 376 377
	2548 2549	378 379 380
	2550 2551	381 382 383
	2552 2553	384 385 386
	2554 2555	387 388 389
	2556 2557	561 566 581
	2558 2559	586 587 588
	2560 2561	589 590 591
	2562 2563	592 593 594
	2564 2565	595 596 597
	2566 2567	598 599 600
	2568 2569	601 602 603
	2570 2571	604 605 606
	2572 2573	607 608 609
	2574 2575	610 611 612
	2576 2577	613 614 615
	2578 2579	616 617 618
	2580 2581	619 620 621
	2582 2583	622 623 624
	2584 2585	625 626 627
	2586 2587	628 629 630
	2588 2589	631 632 633
	2590 2591	634 635 636
	2592 2593	637 638 639
	2594 2595	640 641 642
	2596 2597	643 644 645
	2598 2599	646 647 648
	2600 2601	649 650 651
	2602 2603	652 653 654
	2604 2605	655 656 657
	2606 2607	658 659 660
	2608 2609	661 662 663
	2610 2611	664 665 666
	2613 2614	667 668 669
	2615 2616	670 671 672
	2617 2619	673 674 675
	2620 2621	676 677 678
	2622 2623	679 680 681
	2625 2626	682 683 684
	2627 2628	685 686 687
	2629 2630	688 689 690
	2631 2632	691 692 693
	2633 2634	694 695 697
	2635 2637	698 699 700
	2638 2639	701 702 703
	2640 2641	704 705 706

Table 36: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T		Off / T		
816	2658	2659	707	708	709
	2660	2661	710	711	712
	2662	2664	713	714	715
	2665	2666	716	717	718
	2667	2668	719	720	721
	3738	3739	722	723	724
	3740	3741	725	726	727
	3742	3743	728	729	730
	3744	3745	731	732	733
	3746	3747	734	735	736
	3748	3749	737	738	739
	3750	3751	740	741	742
	3752	3753	743	744	745
	3754	3755	746	747	748
	3756	3757	749	750	751
	3758	3759	752	753	754
	3760	3761	755	756	757
	3762	3763	758	759	760
	3764	3765	761		1039
	3766	3767	1043		1045
	3768	3769	1061		1063
	3770	3771	1067		1068
	3772	3773	1069		1070
	3774	3775	1071		1072
	3776	3777	1073		1074
	3778	3779	1075		1076
	3780	3781	1077		1078
	3782	3783	1081		1082
	3784	3785	1083		1084
	3786	3787	1087		1088
	3788	3789	1089		1090
	3790	3791	1091		1092
	3792	3793	1093		1094
	3794	3795	1095		1096
	3796	3797	1097		1098
	3798	3799	1099		1100
	3800	3801	1101		1102
	3802	3803	1103		1104
	3804	3805	1105		1106
	3806	3807	1107		1111
	3808	3809	1112		1113
	3810	3811	1117		1118
	3812	3813	1119		1120
	3815	3816	1121		1122
	3817	3818	1123		1124
	3819	3821	1125		1126
	3822	3823	1127		1128
	3824	3825	1129		1130
	3827	3828	1131		1132
	3829	3830	1133		1134
	3831	3832	1135		1136
	3833	3834	1141		1142
	3835	3836	1147	1148	

n	On / T		Off / T	
816	3837	3839	1149	1150
	3840	3841	1151	1152
	3842	3843	1153	1154
	3860	3861	1155	1156
	3862	3863	1157	1158
	3864	3866	1159	1160
	3867	3868	1161	1162
	3869	3870	1163	1164
	5270	5271	1165	1177
	5272	5273	1178	1179
	5274	5275	1180	1181
	5276	5277	1182	1183
	5278	5279	1184	1185
	5280	5281	1186	1187
	5282	5283	1188	1189
	5284	5285	1190	1191
	5286	5287	1192	1193
	5288	5289	1208	1209
	5290	5291	1210	1211
	5292	5293	1212	1213
	5294	5295	1214	1215
	5296	5297	1216	1217
	5298	5299	1219	1220
	5300	5301	1221	1222
	5302	5303	1238	1239
	5304	5305	1240	1241
	5306	5307	1243	1244
	5308	5309	1245	1246
	5310	5311	1247	1248
	5312	5313	1249	1250
	5314	5315	1251	1252
	5316	5317	1264	1265
	5318	5319	1266	1267
	5320	5321	1268	1269
	5322	5323	1270	1271
	5324	5325	1272	1273
	5326	5327	1274	1275
	5328	5329	1276	1286
	5330	5331	1287	1288
	5332	5333	1289	1290
	5334	5335	1291	1292
	5336	5337	1293	1294
	5338	5339	1295	1303
	5340	5341	1304	1305
	5342	5343	1306	1307
	5344	5345	1308	1309
	5347	5348	1315	1316
	5349	5350	1317 / 546	
	5351	5353		
	5354	5355		
	5356	5357		
	5359	5360		
	5361	5362		

n	On / T		Off / T
816	5363	5364	
	5365	5366	
	5367	5368	
	5369	5371	
	5372	5373	
	5374	5375	
	5392	5393	
	5394	5395	
	5396	5398	
	5399	5400	
	5401	5402	
	7172	7173	
	7174	7175	
	7176	7177	
	7178	7179	
	7180	7181	
	7182	7183	
	7184	7185	
	7186	7187	
	7188	7189	
	7190	7191	
	7192	7193	
	7194	7195	
	7196	7197	
	7198	7199	
	7200	7201	
	7202	7203	
	7204	7205	
	7206	7207	
	7208	7209	
	7210	7211	
	7212	7213	
	7214	7215	
	7216	7217	
	7218	7219	
	7220	7221	
	7222	7224	
	7225	7226	
	7227	7229	
	7230	7231	
	7232	7234	
	7235	7236	
	7237	7238	
	7239	7240	
	7241	7242	
	7243	7244	
	7245	7246	
	7247	7250	
	7251	7252	
	7256	7257	
	7258	7262	
	7263	7264	
	7265	7267	

Table 37: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
816	7268 7269	
	7270 7271	
	7273 7274	
	7275 7276	
	7295 7296	
	7297 7301	
	7302 7303	
	7304 / 545	
815	581 1061	571 1049
	1063 1756	1051 1746
	7233 7259	7172 7243
	7261 7294 /	7271 7273
	8	7304 / 9
814	8 9 10 11 12	962 1624
	13 30 31 32	1625 1626
	33 34 35 36	1627 1628
	37 38 39 40	1629 1630
	41 42 43 44	1631 1632
	45 46 47 48	1633 1634
	49 50 51 52	1635 1636
	53 54 55 107	1637 1638
	108 109 110	1639 1640
	111 112 113	1641 1642
	114 115 116	1643 1644
	117 118 119	1645 1646
	120 121 122	1647 1648
	123 124 125	1649 1650
	126 127 128	1651 1652
	129 130 131	1653 1654
	132 133 134	1655 1656
	135 136 137	1657 1658
	138 139 140	1659 1660
	141 142 143	1661 1662
	144 145 146	1663 1664
	147 148 149	1665 1666
	150 151 152	1667 1668
	153 154 155	1669 1670
	156 157 158	1671 1672
	159 160 161	1673 1674
	162 163 164	1675 1676
	165 166 167	1677 1678
	279 280 281	1679 1680
	282 283 284	1681 1682
	285 286 287	1683 1684
	288 289 290	1685 1686
	291 292 293	1687 1688
	294 295 296	1689 1690
	297 298 299	1691 1692
	300 301 302	1693 1694
	303 304 305	1695 1696
	306 307 308	1697 1698
	309 310 311	1699 1701
	312 313 314	1702 1703

n	On / T	Off / T
814	315 316 317	1704 1705
	318 319 320	1707 1708
	321 322 323	1709 1710
	324 325 326	1711 1713
	327 328 329	1714 1715
	330 331 332	1716 1717
	333 334 335	1718 1719
	336 337 338	1720 1721
	339 340 341	1722 1723
	342 343 344	1725 1726
	345 346 347	1727 1728
	348 349 350	1729 1747
	351 352 353	1748 1749
	354 355 356	1753 1754
	357 358 359	1755 1756
	360 361 362	2536 2537
	363 364 365	2538 2539
	366 367 368	2540 2541
	369 370 371	2542 2543
	372 373 374	2544 2545
	375 376 377	2546 2547
	378 379 380	2548 2549
	381 382 383	2550 2551
	384 385 386	2552 2553
	387 388 389	2554 2555
	561 566 571	2556 2557
	586 587 588	2558 2559
	589 590 591	2560 2561
	592 593 594	2562 2563
	595 596 597	2564 2565
	598 599 600	2566 2567
	601 602 603	2568 2569
	604 605 606	2570 2571
	607 608 609	2572 2573
	610 611 612	2574 2575
	613 614 615	2576 2577
	616 617 618	2578 2579
	619 620 621	2580 2581
	622 623 624	2582 2583
	625 626 627	2584 2585
	628 629 630	2586 2587
	631 632 633	2588 2589
	634 635 636	2590 2591
	637 638 639	2592 2593
	640 641 642	2594 2595
	643 644 645	2596 2597
	646 647 648	2598 2599
	649 650 651	2600 2601
	652 653 654	2602 2603
	655 656 657	2604 2605
	658 659 660	2606 2607
	661 662 663	2608 2609
	664 665 666	2610 2611

n	On / T	Off / T
814	667 668 669	2613 2614
	670 671 672	2615 2616
	673 674 675	2617 2619
	676 677 678	2620 2621
	679 680 681	2622 2623
	682 683 684	2625 2626
	685 686 687	2627 2628
	688 689 690	2629 2630
	691 692 693	2631 2632
	694 695 696	2633 2634
	697 698 699	2635 2637
	700 701 702	2638 2639
	703 704 705	2640 2641
	706 707 708	2658 2659
	709 710 711	2660 2661
	712 713 714	2662 2664
	715 716 717	2665 2666
	718 719 720	2667 2668
	721 722 723	3738 3739
	724 725 726	3740 3741
	727 728 729	3742 3743
	730 731 732	3744 3745
	733 734 735	3746 3747
	736 737 738	3748 3749
	739 740 741	3750 3751
	742 743 744	3752 3753
	745 746 747	3754 3755
	748 749 750	3756 3757
	751 752 753	3758 3759
	754 755 756	3760 3761
	757 758 759	3762 3763
	760 1039	3764 3765
	1043 1045	3766 3767
	1049 1051	3768 3769
	1067 1068	3770 3771
	1069 1070	3772 3773
	1071 1072	3774 3775
	1073 1074	3776 3777
	1075 1076	3778 3779
	1077 1078	3780 3781
	1079 1080	3782 3783
	1081 1082	3784 3785
	1083 1084	3786 3787
	1085 1086	3788 3789
	1087 1088	3790 3791
	1089 1090	3792 3793
	1091 1092	3794 3795
	1093 1094	3796 3797
	1095 1096	3798 3799
	1097 1098	3800 3801
	1099 1100	3802 3803
	1101 1102	3804 3805
	1103 1104	3806 3807

Table 38: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
814	1105 1106	3808 3809
	1107 1108	3810 3811
	1109 1110	3812 3813
	1111 1112	3815 3816
	1113 1114	3817 3818
	1115 1116	3819 3821
	1117 1118	3822 3823
	1119 1120	3824 3825
	1121 1122	3827 3828
	1123 1124	3829 3830
	1125 1126	3831 3832
	1127 1128	3833 3834
	1129 1130	3835 3836
	1131 1132	3837 3839
	1133 1134	3840 3841
	1135 1136	3842 3843
	1137 1138	3860 3861
	1139 1140	3862 3863
	1141 1142	3864 3866
	1143 1144	3867 3868
	1145 1146	3869 3870
	1147 1148	5270 5271
	1149 1150	5272 5273
	1151 1152	5274 5275
	1153 1154	5276 5277
	1155 1156	5278 5279
	1157 1158	5280 5281
	1159 1160	5282 5283
	1161 1162	5284 5285
	1163 1164	5286 5287
	1165 1166	5288 5289
	1167 1168	5290 5291
	1169 1170	5292 5293
	1171 1172	5294 5295
	1173 1174	5296 5297
	1175 1176	5298 5299
	1177 1178	5300 5301
	1179 1180	5302 5303
	1181 1182	5304 5305
	1183 1184	5306 5307
	1185 1186	5308 5309
	1187 1190	5310 5311
	1191 1192	5312 5313
	1193 1194	5314 5315
	1195 1196	5316 5317
	1197 1198	5318 5319
	1199 1202	5320 5321
	1203 1204	5322 5323
	1205 1208	5324 5325
	1209 1210	5326 5327
	1211 1214	5328 5329
	1215 1216	5330 5331
	1217 1220	5332 5333

n	On / T	Off / T
814	1221 1222	5334 5335
	1223 1249	5336 5337
	1250 1251	5338 5339
	1252 1274	5340 5341
	1275 1276	5342 5343
	1294 1295 /	5344 5345
	543	5347 5348
		5349 5350
		5351 5353
		5354 5355
		5356 5357
		5359 5360
		5361 5362
		5363 5364
		5365 5366
		5367 5368
		5369 5371
		5372 5373
		5374 5375
		5392 5393
		5394 5395
		5396 5398
		5399 5400
		5401 5402
		7173 7174
		7175 7176
		7177 7178
		7179 7180
		7181 7182
		7183 7184
		7185 7186
		7187 7188
		7189 7190
		7191 7192
		7193 7194
		7195 7196
		7197 7198
		7199 7200
		7201 7202
		7203 7204
		7205 7206
		7207 7208
		7209 7210
		7211 7212
		7213 7214
		7215 7216
		7217 7218
		7219 7220
		7221 7222
		7224 7225
		7226 7227
		7229 7230
		7231 7232

n	On / T	Off / T
814		7233 7234
		7235 7236
		7237 7238
		7239 7240
		7241 7242
		7244 7245
		7246 7247
		7250 7251
		7252 7256
		7257 7258
		7259 7261
		7262 7263
		7264 7265
		7267 7268
		7269 7270
		7274 7275
		7276 7294
		7295 7296
		7297 7301
		7302 7303 /
		544
813	761 962 / 2	1194 1195
		1223 / 3
812	/ 0	962 / 1
811	/ 0	761 / 1
810	761 962 1038	1220 1221
	1044 1050	1222 1249
	1056 1062	1250 1251
	1194 1195	1252 1274
	1212 1213 /	1275 1276
	11	1294 1295 /
		12
809	/ 0	761 / 1
808	761 / 1	1212 1213 /
		2
807	/ 0	761 / 1
806	761 / 1	1194 1195 /
		2
805	/ 0	761 / 1
804	/ 0	1044 / 1
803	/ 0	1050 / 1
802	/ 0	1056 / 1
801	/ 0	1038 / 1
800	/ 0	1062 / 1
799	/ 0	962 / 1
798	/ 0	1211 / 1
797	/ 0	1182 / 1
796	1182 / 1	706 1214 / 2
795	706 1214 / 2	1208 1209
		1210 / 3
794	1209 1210	1176 1177
	1211 / 3	1178 1205 /
		4

Table 39: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
793	/ 0	701 / 1
792	/ 0	1202 / 1
791	701 / 1	1203 1204 / 2
790	/ 0	701 / 1
789	1202 1203 1204 / 3	1182 1209 1210 1211 / 4
788	1176 1177 1205 / 3	706 1183 1184 1214 / 4
787	1209 1210 / 2	1176 1177 1205 / 3
786	706 / 1	1209 1210 / 2
785	/ 0	706 / 1
784	701 706 962 1044 1050 1176 1177 1183 1184 1205 1214 / 11	1091 1092 1120 1121 1122 1149 1150 1151 1152 1179 1180 1181 / 12
783	/ 0	1044 / 1
782	/ 0	1050 / 1
781	/ 0	962 / 1
780	962 1050 / 2	1033 1061 1063 / 3
779	/ 0	1050 / 1
778	/ 0	962 / 1
777	/ 0	706 / 1
776	706 962 / 2	1183 1184 1214 / 3
775	1183 1184 1214 / 3	962 1176 1177 1205 / 4
774	1176 1177 1205 / 3	706 1183 1184 1214 / 4
773	1183 1184 1214 / 3	701 1176 1177 1205 / 4
772	701 706 / 2	1183 1184 1214 / 3
771	/ 0	701 / 1
770	/ 0	706 / 1
769	/ 0	1217 / 1
768	701 / 1	1215 1216 / 2
767	/ 0	701 / 1
766	1215 1216 1217 / 3	1172 1202 1203 1204 / 4
765	/ 0	
765		696 / 1
764	696 1172 1202 1203 1204 / 5	691 1164 1165 1166 1193 1196 / 6
763	691 1164 1165 1166 1193 1196 / 6	1170 1171 1172 1199 1202 1203 1204 / 7
762	962 1033 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1701 1702 1703 1704 1705 1707 1708 1709 1710 1711	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326
762	1713 1714 1715 1716 1717 1719 1720 1721 1722 1723 1725 1726 1727 1728 1729 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2613 2614 2615 2616 2617 2619 2620 2621 2622 2623 2625 2626 2627 2628 2629	327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 561 566 571 581 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677

Table 40: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
762	2631 2632	678 679 680
	2633 2634	681 682 683
	2635 2637	684 685 686
	2638 2639	687 688 689
	2640 2641	690 691 692
	3738 3739	693 694 695
	3740 3741	696 697 698
	3742 3743	699 700 702
	3744 3745	703 704 705
	3746 3747	707 708 709
	3748 3749	710 711 712
	3750 3751	713 714 715
	3752 3753	716 717 718
	3754 3755	719 720 721
	3756 3757	722 723 724
	3758 3759	725 726 727
	3760 3761	728 729 730
	3762 3763	731 732 733
	3764 3765	734 735 736
	3766 3767	737 738 739
	3768 3769	740 741 742
	3770 3771	743 744 745
	3772 3773	746 747 748
	3774 3775	749 750 751
	3776 3777	752 753 754
	3778 3779	755 756 757
	3780 3781	758 759 760
	3782 3783	1039 1043
	3784 3785	1045 1049
	3786 3787	1051 1067
	3788 3789	1068 1069
	3790 3791	1070 1071
	3792 3793	1072 1073
	3794 3795	1074 1075
	3796 3797	1076 1077
	3798 3799	1078 1079
	3800 3801	1080 1081
	3802 3803	1082 1083
	3804 3805	1084 1085
	3806 3807	1086 1087
	3808 3809	1088 1089
	3810 3811	1090 1093
	3812 3813	1094 1095
	3815 3816	1096 1097
	3817 3818	1098 1099
	3819 3821	1100 1101
	3822 3823	1102 1103
	3824 3825	1104 1105
	3827 3828	1106 1107
	3829 3830	1108 1109
	3831 3833	1110 1111
	3834 3835	1112 1113
	3836 3837	1114 1115

n	On / T	Off / T
762	3839 3840	1116 1117
	3841 3842	1118 1119
	3843 5270	1123 1124
	5271 5272	1125 1126
	5273 5274	1127 1128
	5275 5276	1129 1130
	5277 5278	1131 1132
	5279 5280	1133 1134
	5281 5282	1135 1136
	5283 5284	1137 1138
	5285 5286	1139 1140
	5287 5288	1141 1142
	5289 5290	1143 1144
	5291 5292	1145 1146
	5293 5294	1147 1148
	5295 5296	1153 1154
	5297 5298	1155 1156
	5299 5300	1157 1158
	5301 5302	1159 1160
	5303 5304	1161 1162
	5305 5306	1163 1164
	5307 5308	1165 1166
	5309 5310	1167 1168
	5311 5312	1169 1173
	5313 5314	1174 1175
	5315 5316	1185 1186
	5317 5318	1187 1190
	5319 5320	1191 1192
	5321 5322	1193 1196
	5323 5324	1197 1198
	5325 5326	1215 1216
	5327 5328	1217 / 496
	5329 5330	
	5331 5332	
	5333 5334	
	5335 5336	
	5337 5338	
	5339 5340	
	5341 5342	
	5343 5344	
	5345 5347	
	5348 5349	
	5350 5351	
	5353 5354	
	5355 5356	
	5357 5359	
	5360 5361	
	5362 5363	
	5365 5366	
	5367 5368	
	5369 5371	
	5372 5373	
	5374 5375	

n	On / T	Off / T
762	7172 7173	
	7174 7175	
	7176 7177	
	7178 7179	
	7180 7181	
	7182 7183	
	7184 7185	
	7186 7187	
	7188 7189	
	7190 7191	
	7192 7193	
	7194 7195	
	7196 7197	
	7198 7199	
	7200 7201	
	7202 7203	
	7204 7205	
	7206 7207	
	7208 7209	
	7210 7211	
	7212 7213	
	7214 7215	
	7216 7217	
	7218 7219	
	7220 7221	
	7222 7224	
	7225 7226	
	7227 7229	
	7230 7231	
	7232 7233	
	7234 7235	
	7236 7237	
	7239 7240	
	7241 7242	
	7244 7245	
	7246 7247	
	7250 7251	
	7252 7256	
	7257 7258	
	7259 7261	
	7262 7263	
	7264 7268	
	7269 7270	
	7274 7275	
	7276 / 495	
761	/ 0	7172 / 1
760	/ 0	7261 / 1
759	1 7261 / 2	576 1055 1057 / 3
758	/ 0	1 / 1
757	581 1063 / 2	7233 7259 7261 / 3
756	1 / 1	581 1063 / 2

Table 41: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
755	/ 0	1 / 1
754	/ 0	1048 / 1
753	8 9 10 11 12	1018 1046
	13 30 31 32	1047 1624
	33 34 35 36	1625 1626
	37 38 39 40	1627 1628
	41 42 43 44	1629 1630
	45 46 47 48	1631 1632
	49 50 51 52	1633 1634
	53 54 55 107	1635 1636
	108 109 110	1637 1638
	111 112 113	1639 1640
	114 115 116	1641 1642
	117 118 119	1643 1644
	120 121 122	1645 1646
	123 124 125	1647 1648
	126 127 128	1649 1650
	129 130 131	1651 1652
	132 133 134	1653 1654
	135 136 137	1655 1656
	138 139 140	1657 1658
	141 142 143	1659 1660
	144 145 146	1661 1662
	147 148 149	1663 1664
	150 151 152	1665 1666
	153 154 155	1667 1668
	156 157 158	1669 1670
	159 160 161	1671 1672
	162 163 164	1673 1674
	165 166 167	1675 1676
	279 280 281	1677 1678
	282 283 284	1679 1680
	285 286 287	1681 1682
	288 289 290	1683 1684
	291 292 293	1685 1686
	294 295 296	1687 1688
	297 298 299	1689 1690
	300 301 302	1691 1692
	303 304 305	1693 1694
	306 307 308	1695 1696
	309 310 311	1697 1698
	312 313 314	1699 1701
	315 316 317	1702 1703
	318 319 320	1704 1705
	321 322 323	1707 1708
	324 325 326	1709 1710
	327 328 329	1711 1713
	330 331 332	1714 1715
	333 334 335	1716 1717
	336 337 338	1719 1720
	339 340 341	1721 1722
	342 343 344	1723 1725
	345 346 347	1726 1727

n	On / T	Off / T
753	348 349 350	1728 1729
	351 352 353	2536 2537
	354 355 356	2538 2539
	357 358 359	2540 2541
	360 361 362	2542 2543
	363 364 365	2544 2545
	366 367 368	2546 2547
	369 370 371	2548 2549
	372 373 374	2550 2551
	375 376 377	2552 2553
	378 379 380	2554 2555
	381 382 383	2556 2557
	384 385 386	2558 2559
	387 388 389	2560 2561
	561 566 571	2562 2563
	576 581 586	2564 2565
	587 588 589	2566 2567
	590 591 592	2568 2569
	593 594 595	2570 2571
	596 597 598	2572 2573
	599 600 601	2574 2575
	602 603 604	2576 2577
	605 606 607	2578 2579
	608 609 610	2580 2581
	611 612 613	2582 2583
	614 615 616	2584 2585
	617 618 619	2586 2587
	620 621 622	2588 2589
	623 624 625	2590 2591
	626 627 628	2592 2593
	629 630 631	2594 2595
	632 633 634	2596 2597
	635 636 637	2598 2599
	638 639 640	2600 2601
	641 642 643	2602 2603
	644 645 646	2604 2605
	647 648 649	2606 2607
	650 651 652	2608 2609
	653 654 655	2610 2611
	656 657 658	2613 2614
	659 660 661	2615 2616
	662 663 664	2617 2619
	665 666 667	2620 2621
	668 669 670	2622 2623
	671 672 673	2625 2626
	674 675 676	2627 2628
	677 678 679	2629 2631
	680 681 682	2632 2633
	683 684 685	2634 2635
	686 687 688	2637 2638
	689 690 691	2639 2640
	692 693 694	2641 3738
	695 696 697	3739 3740

n	On / T	Off / T
753	698 699 700	3741 3742
	701 702 703	3743 3744
	704 705 706	3745 3746
	707 708 709	3747 3748
	710 711 712	3749 3750
	713 714 715	3751 3752
	716 717 718	3753 3754
	719 720 721	3755 3756
	722 723 724	3757 3758
	725 726 727	3759 3760
	728 729 730	3761 3762
	731 732 733	3763 3764
	734 735 736	3765 3766
	737 738 739	3767 3768
	740 741 742	3769 3770
	743 744 745	3771 3772
	746 747 748	3773 3774
	749 750 751	3775 3776
	752 753 754	3777 3778
	755 756 757	3779 3780
	758 759 760	3781 3782
	761 1038	3783 3784
	1039 1051	3785 3786
	1055 1056	3787 3788
	1057 1061	3789 3790
	1062 1063	3791 3792
	1067 1068	3793 3794
	1069 1070	3795 3796
	1071 1072	3797 3798
	1081 1082	3799 3800
	1083 1084	3801 3802
	1085 1086	3803 3804
	1087 1088	3805 3806
	1089 1090	3807 3808
	1091 1092	3809 3810
	1093 1094	3811 3812
	1095 1096	3813 3815
	1097 1098	3816 3817
	1099 1100	3818 3819
	1101 1111	3821 3822
	1112 1113	3823 3824
	1114 1115	3825 3827
	1116 1117	3828 3829
	1118 1119	3830 3831
	1120 1121	3833 3834
	1122 1123	3835 3836
	1124 1125	3837 3839
	1126 1127	3840 3841
	1128 1129	3842 3843
	1130 1141	5270 5271
	1142 1143	5272 5273
	1144 1145	5274 5275
	1146 1147	5276 5277

Table 42: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
753	1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1202 1203 1204 1205 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 / 491	5278 5279 5280 5281 5282 5283 5284 5285 5286 5287 5288 5289 5290 5291 5292 5293 5294 5295 5296 5297 5298 5299 5300 5301 5302 5303 5304 5305 5306 5307 5308 5309 5310 5311 5312 5313 5314 5315 5316 5317 5318 5319 5320 5321 5322 5323 5324 5325 5326 5327 5328 5329 5330 5331 5332 5333 5334 5335 5336 5337 5338 5339 5340 5341 5342 5343 5344 5345 5347 5348 5349 5350 5351 5353 5354 5355 5356 5357 5359 5360 5361 5362 5363 5365 5366 5367 5368 5369 5371 5372 5373 5374 5375 7173 7174 7175 7176 7177 7178 7179 7180 7181 7182 7183 7184 7185 7186 7187 7188 7189 7190 7191 7192 7193 7194 7195 7196 7197 7198 7199 7200 7201 7202 7203 7204 7205 7206 7207 7208 7209 7210 7211 7212 7213 7214 7215 7216 7217 7218 7219 7220 7221 7222 7224 7225 7226 7227 7229 7230 7231 7232 7234 7235 7236 7237 7239 7240 7241 7242 7244 7245 7246 7247 7250 7251 7252 7256 7257 7258 7262 7263 7264 7268 7269 7270 7274 7275 7276 / 492
752	1 1206 1207 / 3	1023 1051 1212 1213 / 4
751	1023 1051 / 2	1 1206 1207 / 3
750	1 / 1	1023 1051 / 2
749	/ 0	1 / 1
748	/ 0	761 / 1
747	/ 0	691 / 1
746	/ 0	1056 / 1
745	/ 0	1038 / 1
744	/ 0	962 / 1
743	/ 0	1062 / 1
742	/ 0	686 / 1
741	686 1062 / 2	1158 1159 1217 / 3
740	/ 0	1062 / 1
739	/ 0	686 / 1
738	/ 0	696 / 1
737	686 696 / 2	1171 1172 1202 / 3
736	/ 0	696 / 1
735	/ 0	686 / 1
734	/ 0	1214 / 1
733	696 / 1	1215 1216 / 2
732	1214 1215 1216 / 3	696 1072 1101 1130 / 4
731	1072 1101 1130 / 3	1184 1214 1215 1216 / 4
730	1184 1214 1215 1216 / 4	566 1042 1072 1101 1130 / 5
729	1101 1130 / 2	997 1017 1019 / 3
728	566 997 1017 1019 1042 1072 / 6	1182 1183 1184 1211 1214 1215 1216 / 7
727	1182 1183 1184 1211 1214 1215 1216 / 7	566 997 1017 1019 1042 1072 1101 1130 / 8
726	566 686 696 962 997 1017 1019 1042 1062 1072 1101 1130 1171 1172 1202 / 15	1068 1097 1098 1126 1127 1128 1155 1156 1157 1184 1185 1186 1187 1214 1215 1216 / 16
725	/ 0	1062 / 1
724	1097 1126 1127 1155 1156 1157 1184 1185 1186 1187 1214 1215 1216 / 13	962 1039 1040 1041 1042 1069 1070 1071 1072 1099 1100 1101 1129 1130 / 14
723	1039 1040 1041 1042 1069 1070 1071 1072 1099 1100	686 1097 1126 1127 1155 1156 1157 1184 1185 1186

Table 43: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
723	1101 1129 1130 / 13	1187 1214 1215 1216 / 14
722	686 962 / 2	1013 1039 1067 / 3
721	1126 1127 1155 1156 1157 1184 1185 1186 1187 1214 1215 1216 / 12	962 1040 1041 1042 1069 1070 1071 1072 1099 1100 1101 1129 1130 / 13
720	1238 1239 1240 1264 1265 1266 1267 1286 1287 1288 1303 1304 / 12	686 1126 1127 1155 1156 1157 1184 1185 1186 1187 1214 1215 1216 / 13
719	761 / 1	1303 1304 / 2
718	1046 1047 1048 1075 1076 1077 1078 1105 1106 1107 / 10	761 1238 1239 1240 1264 1265 1266 1267 1286 1287 1288 / 11
717	1 686 691 761 962 1056 1062 1206 1207 / 9	1046 1047 1048 1075 1076 1077 1078 1105 1106 1107 / 10
716	/ 0	1 / 1
715	1 / 1	1206 1207 / 2
714	/ 0	1 / 1
713	1 / 1	691 761 / 2
712	/ 0	686 / 1
711	/ 0	1056 / 1
710	/ 0	962 / 1
709	/ 0	1062 / 1
708	/ 0	1 / 1
707	/ 0	696 / 1
706	1 696 / 2	1182 1183 1211 / 3
705	/ 0	1 / 1
704	/ 0	706 / 1
703	/ 0	696 / 1
702	696 706 / 2	1171 1172 1202 / 3
701	/ 0	706 / 1
700	/ 0	696 / 1
699	/ 0	
699		566 / 1
698	566 706 / 2	997 1017 1019 / 3
697	/ 0	706 / 1
696	/ 0	566 / 1
695	/ 0	1205 / 1
694	566 1205 / 2	1208 1209 1210 / 3
693	1208 1209 1210 / 3	566 1096 1125 1154 / 4
692	/ 0	1066 / 1
691	566 962 997 1013 1017 1018 1019 1023 1040 1041 1042 1043 1045 1046 1047 1048 1066 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317
691	1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1701 1702 1703 1704 1705 1707 1708 1709 1710 1711 1713 1714 1715 1716 1717 1719 1720 1721 1722 1723 1725 1726 1727 1728 1729 1753 1754 1755 1756 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602	318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 561 571 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670

Table 44: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
691	2603 2604	671 672 673
	2605 2606	674 675 676
	2607 2608	677 678 679
	2609 2610	680 681 682
	2611 2613	683 684 685
	2614 2615	687 688 689
	2616 2617	690 692 693
	2619 2620	694 695 697
	2621 2622	698 699 700
	2623 2625	701 702 703
	2626 2627	704 705 707
	2628 2629	708 709 710
	2631 2632	711 712 713
	2633 2634	714 715 716
	2635 2637	717 718 719
	2638 2639	720 721 722
	2640 2641	723 724 725
	2665 2666	726 727 728
	2667 2668	729 730 731
	3738 3739	732 733 734
	3740 3741	735 736 737
	3742 3743	738 739 740
	3744 3745	741 742 743
	3746 3747	744 745 746
	3748 3749	747 748 749
	3750 3751	750 751 752
	3752 3753	753 754 755
	3754 3755	756 757 758
	3756 3757	759 760 1081
	3758 3759	1082 1083
	3760 3761	1084 1085
	3762 3763	1086 1087
	3764 3765	1088 1089
	3766 3767	1090 1091
	3768 3769	1092 1093
	3770 3771	1094 1095
	3772 3773	1111 1112
	3774 3775	1113 1114
	3776 3777	1115 1116
	3778 3779	1117 1118
	3780 3781	1119 1120
	3782 3783	1121 1122
	3784 3785	1123 1124
	3786 3787	1141 1142
	3788 3789	1143 1144
	3790 3791	1145 1146
	3792 3793	1147 1148
	3794 3795	1149 1150
	3796 3797	1151 1152
	3798 3799	1153 1173
	3800 3801	1174 1175
	3802 3803	1176 1177
	3804 3805	1178 1179

n	On / T	Off / T
691	3806 3807	1180 1181
	3808 3809	1203 1204
	3810 3811	1205 1208
	3812 3813	1209 1210 /
	3815 3816	434
	3817 3818	
	3819 3821	
	3822 3823	
	3824 3825	
	3827 3828	
	3829 3830	
	3831 3833	
	3834 3835	
	3836 3837	
	3839 3840	
	3841 3842	
	3843 3867	
	3868 3869	
	3870 5271	
	5272 5273	
	5274 5275	
	5276 5277	
	5278 5279	
	5280 5281	
	5282 5283	
	5284 5285	
	5286 5287	
	5288 5289	
	5290 5291	
	5292 5293	
	5294 5295	
	5296 5297	
	5298 5299	
	5300 5301	
	5302 5303	
	5304 5305	
	5306 5307	
	5308 5309	
	5310 5311	
	5312 5313	
	5314 5315	
	5316 5317	
	5318 5319	
	5320 5321	
	5322 5323	
	5324 5325	
	5327 5328	
	5329 5330	
	5331 5332	
	5333 5334	
	5335 5336	
	5337 5338	
	5339 5340	

n	On / T	Off / T
691	5341 5342	
	5343 5344	
	5345 5347	
	5348 5349	
	5350 5354	
	5355 5356	
	5357 5359	
	5360 5361	
	5362 5363	
	5365 5366	
	5367 5368	
	5369 5371	
	5372 5373	
	5374 5375	
	5399 5400	
	5401 5402 /	
	433	
690	8 9 10 11 12	962 1013
	13 30 31 32	1018 1023
	33 34 35 36	1040 1041
	37 38 39 40	1042 1043
	41 42 43 44	1045 1046
	45 46 47 48	1047 1048
	49 50 51 52	1624 1625
	53 54 55 107	1626 1627
	108 109 110	1628 1629
	111 112 113	1630 1631
	114 115 116	1632 1633
	117 118 119	1634 1635
	120 121 122	1636 1637
	123 124 125	1638 1639
	126 127 128	1640 1641
	129 130 131	1642 1643
	132 133 134	1644 1645
	135 136 137	1646 1647
	138 139 140	1648 1649
	141 142 143	1650 1651
	144 145 146	1652 1653
	147 148 149	1654 1655
	150 151 152	1656 1657
	153 154 155	1658 1659
	156 157 158	1660 1661
	159 160 161	1662 1663
	162 163 164	1664 1665
	165 166 167	1666 1667
	279 280 281	1668 1669
	282 283 284	1670 1671
	285 286 287	1672 1673
	288 289 290	1674 1675
	291 292 293	1676 1677
	294 295 296	1678 1679
	297 298 299	1680 1681
	300 301 302	1682 1683

Table 45: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
690	303 304 305	1684 1685
	306 307 308	1686 1687
	309 310 311	1688 1689
	312 313 314	1690 1691
	315 316 317	1692 1693
	318 319 320	1694 1695
	321 322 323	1696 1697
	324 325 326	1698 1699
	327 328 329	1701 1702
	330 331 332	1703 1704
	333 334 335	1705 1707
	336 337 338	1708 1709
	339 340 341	1710 1711
	342 343 344	1713 1714
	345 346 347	1715 1716
	348 349 350	1717 1719
	351 352 353	1720 1721
	354 355 356	1722 1723
	357 358 359	1725 1726
	360 361 362	1727 1728
	363 364 365	1729 1753
	366 367 368	1754 1755
	369 370 371	1756 2536
	372 373 374	2537 2538
	375 376 377	2539 2540
	378 379 380	2541 2542
	381 382 383	2543 2544
	384 385 386	2545 2546
	387 388 389	2547 2548
	561 571 586	2549 2550
	587 588 589	2551 2552
	590 591 592	2553 2554
	593 594 595	2555 2556
	596 597 598	2557 2558
	599 600 601	2559 2560
	602 603 604	2561 2562
	605 606 607	2563 2564
	608 609 610	2565 2566
	611 612 613	2567 2568
	614 615 616	2569 2570
	617 618 619	2571 2572
	620 621 622	2573 2574
	623 624 625	2575 2576
	626 627 628	2577 2578
	629 630 631	2579 2580
	632 633 634	2581 2582
	635 636 637	2583 2584
	638 639 640	2585 2586
	641 642 643	2587 2588
	644 645 646	2589 2590
	647 648 649	2591 2592
	650 651 652	2593 2594
	653 654 655	2595 2596

n	On / T	Off / T
690	656 657 658	2597 2598
	659 660 661	2599 2600
	662 663 664	2601 2602
	665 666 667	2603 2604
	668 669 670	2605 2606
	671 672 673	2607 2608
	674 675 676	2609 2610
	677 678 679	2611 2613
	680 681 682	2614 2615
	683 684 685	2616 2617
	687 688 689	2619 2620
	690 692 693	2621 2622
	694 695 697	2623 2625
	698 699 700	2626 2627
	702 703 704	2628 2629
	705 707 708	2631 2632
	709 710 711	2633 2634
	712 713 714	2635 2637
	715 716 717	2638 2639
	718 719 720	2640 2641
	721 722 723	2665 2666
	724 725 726	2667 2668
	727 728 729	3738 3739
	730 731 732	3740 3741
	733 734 735	3742 3743
	736 737 738	3744 3745
	739 740 741	3746 3747
	742 743 744	3748 3749
	745 746 747	3750 3751
	748 749 750	3752 3753
	751 752 753	3754 3755
	754 755 756	3756 3757
	757 758 759	3758 3759
	760 1081	3760 3761
	1082 1083	3762 3763
	1084 1085	3764 3765
	1086 1087	3766 3767
	1088 1089	3768 3769
	1090 1091	3770 3771
	1092 1093	3772 3773
	1094 1095	3774 3775
	1096 1111	3776 3777
	1112 1113	3778 3779
	1114 1115	3780 3781
	1116 1117	3782 3783
	1118 1119	3784 3785
	1120 1121	3786 3787
	1122 1123	3788 3789
	1124 1125	3790 3791
	1141 1142	3792 3793
	1143 1144	3794 3795
	1145 1146	3796 3797
	1147 1148	3798 3799

n	On / T	Off / T
690	1149 1150	3800 3801
	1151 1152	3802 3803
	1153 1154	3804 3805
	1173 1174	3806 3807
	1175 1179	3808 3809
	1180 1181 /	3810 3811
	427	3812 3813
		3815 3816
		3817 3818
		3819 3821
		3822 3823
		3824 3825
		3827 3828
		3829 3830
		3831 3833
		3834 3835
		3836 3837
		3839 3840
		3841 3842
		3843 3867
		3868 3869
		3870 5271
		5272 5273
		5274 5275
		5276 5277
		5278 5279
		5280 5281
		5282 5283
		5284 5285
		5286 5287
		5288 5289
		5290 5291
		5292 5293
		5294 5295
		5296 5297
		5298 5299
		5300 5301
		5302 5303
		5304 5305
		5306 5307
		5308 5309
		5310 5311
		5312 5313
		5314 5315
		5316 5317
		5318 5319
		5320 5321
		5322 5323
		5324 5325
		5327 5328
		5329 5330
		5331 5332
		5333 5334

Table 46: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
690		5335 5336
		5337 5338
		5339 5340
		5341 5342
		5343 5344
		5345 5347
		5348 5349
		5350 5354
		5355 5356
		5357 5359
		5360 5361
		5362 5363
		5365 5366
		5367 5368
		5369 5371
		5372 5373
		5374 5375
		5399 5400
		5401 5402 /
		428
689	1 962 1013	8 9 10 11 12
	1018 1023	13 30 31 32
	1040 1041	33 34 35 36
	1042 1043	37 38 39 40
	1045 1046	41 42 43 44
	1047 1048	45 46 47 48
	1049 1051	49 50 51 52
	1624 1625	53 54 55 107
	1626 1627	108 109 110
	1628 1629	111 112 113
	1630 1631	114 115 116
	1632 1633	117 118 119
	1634 1635	120 121 122
	1636 1637	123 124 125
	1638 1639	126 127 128
	1640 1641	129 130 131
	1642 1643	132 133 134
	1644 1645	135 136 137
	1646 1647	138 139 140
	1648 1649	141 142 143
	1650 1651	144 145 146
	1652 1653	147 148 149
	1654 1655	150 151 152
	1656 1657	153 154 155
	1658 1659	156 157 158
	1660 1661	159 160 161
	1662 1663	162 163 164
	1664 1665	165 166 167
	1666 1667	279 280 281
	1668 1669	282 283 284
	1670 1671	285 286 287
	1672 1673	288 289 290
	1674 1675	291 292 293

n	On / T	Off / T
689	1676 1677	294 295 296
	1678 1679	297 298 299
	1680 1681	300 301 302
	1682 1683	303 304 305
	1684 1685	306 307 308
	1686 1687	309 310 311
	1688 1689	312 313 314
	1690 1691	315 316 317
	1692 1693	318 319 320
	1694 1695	321 322 323
	1696 1697	324 325 326
	1698 1699	327 328 329
	1701 1702	330 331 332
	1703 1704	333 334 335
	1705 1707	336 337 338
	1708 1709	339 340 341
	1710 1711	342 343 344
	1713 1714	345 346 347
	1715 1716	348 349 350
	1717 1719	351 352 353
	1720 1721	354 355 356
	1722 1723	357 358 359
	1725 1726	360 361 362
	1727 1728	363 364 365
	1729 1746	366 367 368
	1747 1748	369 370 371
	1749 2536	372 373 374
	2537 2538	375 376 377
	2539 2540	378 379 380
	2541 2542	381 382 383
	2543 2544	384 385 386
	2545 2546	387 388 389
	2547 2548	561 581 586
	2549 2550	587 588 589
	2551 2552	590 591 592
	2553 2554	593 594 595
	2555 2556	596 597 598
	2557 2558	599 600 601
	2559 2560	602 603 604
	2561 2562	605 606 607
	2563 2564	608 609 610
	2565 2566	611 612 613
	2567 2568	614 615 616
	2569 2570	617 618 619
	2571 2572	620 621 622
	2573 2574	623 624 625
	2575 2576	626 627 628
	2577 2578	629 630 631
	2579 2580	632 633 634
	2581 2582	635 636 637
	2583 2584	638 639 640
	2585 2586	641 642 643
	2587 2588	644 645 646

n	On / T	Off / T
689	2589 2590	647 648 649
	2591 2592	650 651 652
	2593 2594	653 654 655
	2595 2596	656 657 658
	2597 2598	659 660 661
	2599 2600	662 663 664
	2601 2602	665 666 667
	2603 2604	668 669 670
	2605 2606	671 672 673
	2607 2608	674 675 676
	2609 2610	677 678 679
	2611 2613	680 681 682
	2614 2615	683 684 685
	2616 2617	687 688 689
	2619 2620	690 692 693
	2621 2622	694 695 697
	2623 2625	698 699 700
	2626 2627	702 703 704
	2628 2629	705 707 708
	2631 2632	709 710 711
	2633 2634	712 713 714
	2635 2637	715 716 717
	2638 2639	718 719 720
	2640 2641	721 722 723
	2658 2659	724 725 726
	2660 2661	727 728 729
	3738 3739	730 731 732
	3740 3741	733 734 735
	3742 3743	736 737 738
	3744 3745	739 740 741
	3746 3747	742 743 744
	3748 3749	745 746 747
	3750 3751	748 749 750
	3752 3753	751 752 753
	3754 3755	754 755 756
	3756 3757	757 758 759
	3758 3759	760 1061
	3760 3761	1063 1081
	3762 3763	1082 1083
	3764 3765	1084 1085
	3766 3767	1086 1087
	3768 3769	1088 1089
	3770 3771	1090 1091
	3772 3773	1092 1093
	3774 3775	1094 1095
	3776 3777	1096 1111
	3778 3779	1112 1113
	3780 3781	1114 1115
	3782 3783	1116 1117
	3784 3785	1118 1119
	3786 3787	1120 1121
	3788 3789	1122 1123
	3790 3791	1124 1125

Table 47: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
689	3792 3793 3794 3795 3796 3797 3798 3799 3800 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810 3811 3812 3813 3815 3816 3817 3818 3819 3821 3822 3823 3824 3825 3827 3828 3829 3830 3831 3833 3834 3835 3836 3837 3839 3840 3841 3842 3843 3860 3861 3862 3863 5271 5272 5273 5274 5275 5276 5277 5278 5279 5280 5281 5282 5283 5284 5285 5286 5287 5288 5289 5290 5291 5292 5293 5294 5295 5296 5297 5298 5299 5300 5301 5302 5303 5304 5305 5306 5307 5308 5309 5310 5311 5312 5313 5314 5315 5316 5317 5318 5319 5320 5321 5322 5323 5324 5325	1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1173 1174 1175 1179 1180 1181 / 429

n	On / T	Off / T
689	5327 5328 5329 5330 5331 5332 5333 5334 5335 5336 5337 5338 5339 5340 5342 5343 5344 5345 5347 5348 5349 5350 5354 5355 5356 5357 5359 5360 5361 5362 5363 5365 5366 5367 5368 5372 5373 5374 5375 5392 5393 5394 5395 / 428	
688	/ 0	1 / 1
687	581 1061 1063 / 3	566 1043 1045 1746 / 4
686	1 1746 5341 5369 5371 / 5	581 1061 1063 5321 5347 5375 / 6
685	581 1061 1063 / 3	1 5341 5369 5371 / 4
684	5326 5351 5353 / 3	581 1061 1063 5395 / 4
683	5270 5395 / 2	5326 5351 5353 / 3
682	/ 0	5270 / 1
681	1 8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127	1013 1018 1033 1040 1041 1042 1057 1058 1059 1060 1064 1065 1066 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640

n	On / T	Off / T
681	128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 561 566 581 586 587 588 589 590	1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1701 1702 1703 1704 1705 1707 1708 1709 1710 1711 1713 1714 1715 1716 1717 1719 1720 1721 1722 1723 1725 1726 1727 1728 1729 1746 1747 1748 1749 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553

Table 48: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
681	591 592 593	2554 2555
	594 595 596	2556 2557
	597 598 599	2558 2559
	600 601 602	2560 2561
	603 604 605	2562 2563
	606 607 608	2564 2565
	609 610 611	2566 2567
	612 613 614	2568 2569
	615 616 617	2570 2571
	618 619 620	2572 2573
	621 622 623	2574 2575
	624 625 626	2576 2577
	627 628 629	2578 2579
	630 631 632	2580 2581
	633 634 635	2582 2583
	636 637 638	2584 2585
	639 640 641	2586 2587
	642 643 644	2588 2589
	645 646 647	2590 2591
	648 649 650	2592 2593
	651 652 653	2594 2595
	654 655 656	2596 2597
	657 658 659	2598 2599
	660 661 662	2600 2601
	663 664 665	2602 2603
	666 667 668	2604 2605
	669 670 671	2606 2607
	672 673 674	2608 2609
	675 676 677	2610 2611
	678 679 680	2613 2614
	681 682 683	2615 2616
	684 685 686	2617 2619
	687 688 689	2620 2621
	690 691 692	2622 2623
	693 694 695	2625 2626
	696 697 698	2627 2628
	699 700 701	2629 2631
	702 703 704	2632 2633
	705 706 707	2634 2635
	708 709 710	2637 2638
	711 712 713	2639 2640
	714 715 716	2641 2658
	717 718 719	2659 2660
	720 721 722	2661 3738
	723 724 725	3739 3740
	726 727 728	3741 3742
	729 730 731	3743 3744
	732 733 734	3745 3746
	735 736 737	3747 3748
	738 739 740	3749 3750
	741 742 743	3751 3752
	744 745 746	3753 3754
	747 748 749	3755 3756

n	On / T	Off / T
681	750 751 752	3757 3758
	753 754 755	3759 3760
	756 757 758	3761 3762
	759 760 1050	3763 3764
	1075 1076	3765 3766
	1077 1078	3767 3768
	1079 1080	3769 3770
	1081 1082	3771 3772
	1083 1084	3773 3774
	1105 1106	3775 3776
	1107 1108	3777 3778
	1109 1110	3779 3780
	1111 1112	3781 3782
	1113 1135	3783 3784
	1136 1137	3785 3786
	1138 1139	3787 3788
	1140 1141	3789 3790
	1142 1165	3791 3792
	1166 1167	3793 3794
	1168 1169	3795 3796
	1170 1171	3797 3798
	1196 1197	3799 3800
	1198 1199 /	3801 3802
	422	3803 3804
		3805 3806
		3807 3808
		3809 3810
		3811 3812
		3813 3815
		3816 3817
		3818 3819
		3821 3822
		3823 3824
		3825 3827
		3828 3829
		3830 3831
		3833 3834
		3835 3836
		3837 3839
		3840 3841
		3842 3843
		3860 3861
		3862 3863
		5271 5272
		5273 5274
		5275 5276
		5277 5278
		5279 5280
		5281 5282
		5283 5284
		5285 5286
		5287 5288
		5289 5290

n	On / T	Off / T
681		5291 5292
		5293 5294
		5295 5296
		5297 5298
		5299 5300
		5301 5302
		5303 5304
		5305 5306
		5307 5308
		5309 5310
		5311 5312
		5313 5314
		5315 5316
		5317 5318
		5319 5320
		5322 5323
		5324 5325
		5327 5328
		5329 5330
		5331 5332
		5333 5334
		5335 5336
		5337 5338
		5339 5340
		5342 5343
		5344 5345
		5348 5349
		5350 5354
		5355 5356
		5357 5359
		5360 5361
		5362 5363
		5365 5366
		5367 5368
		5372 5373
		5374 5392
		5393 5394
		5395 / 423
680	761 / 1	1028 1055 / 2
679	/ 0	706 / 1
678	/ 0	761 / 1
677	/ 0	1050 / 1
676	/ 0	962 / 1
675	/ 0	701 / 1
674	/ 0	686 / 1
673	/ 0	1 / 1
672	/ 0	581 / 1
671	1 581 / 2	1009 1032 1034 / 3
670	1009 1032 1034 / 3	696 1170 1171 1199 / 4
669		

Table 49: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
669	696 1170 1171 1199 / 4	1 581 1009 1032 1034 / 5
668	/ 0	561 / 1
667	1 561 / 2	993 1014 1037 / 3
666	/ 0	561 / 1
665	/ 0	1 / 1
664	1 962 993 1009 1013 1014 1018 1028 1032 1033 1034 1037 1040 1041 1042 1058 1059 1060 1064 1065 1066 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1701 1702 1703 1704 1705 1707 1708 1709 1710 1711 1713 1714 1715 1716 1717 1719 1720 1721 1722 1723 1725 1726 1727 1728 1729 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2613 2614 2615 2616 2617 2619 2620 2621 2622 2623 2625 2626 2627 2628 2629 2631 2632 2633 2634 2635 2637 2638 2639 2640 2641 3738 3739 3740 3741 3742 3743 3744 3745 3746 3747 3748 3749 3750 3751 3752 3753 3754 3755 3756 3757 3758 3759 3760 3761 3762 3763 3764 3765 3766 3767 3768 3769 3770 3771 3772 3773 3774 3775 3776 3777 3778 3779 3780 3781 3782 3783 3784 3785 3786 3787 3788 3789 3790 3791 3792 3793 3794 3795 3796 3797 3798 3799 3800 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810 3811 3812 3813 3815 3816 3817 3818 3819	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 566 576 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 687 688 689 690 691 692 693 694 695 696 697 698 699 700 702 703 704 705 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1105 1106 1107 1108 1109 1110 1111 1112 1113 1135 1136 1137 1138 1139 1140 1141 1142 1165 1166 1167 1168 1169 1170 1171 1196 1197 1198 1199 / 416

Table 50: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
664	3821 3822	
	3823 3824	
	3825 3827	
	3828 3829	
	3830 3831	
	3833 3834	
	3835 3836	
	3837 3839	
	3840 3841	
	3842 3843	
	5271 5272	
	5273 5274	
	5275 5276	
	5277 5278	
	5279 5280	
	5281 5282	
	5283 5284	
	5285 5286	
	5287 5288	
	5289 5290	
	5291 5292	
	5293 5294	
	5295 5296	
	5297 5298	
	5299 5300	
	5301 5302	
	5303 5304	
	5305 5306	
	5307 5308	
	5309 5310	
	5311 5312	
	5313 5314	
	5315 5316	
	5317 5318	
	5319 5320	
	5322 5323	
	5324 5325	
	5326 5327	
	5328 5329	
	5330 5332	
	5333 5334	
	5335 5336	
	5337 5338	
	5339 5340	
	5342 5343	
	5344 5345	
	5348 5349	
	5350 5351	
	5353 5354	
	5355 5356	
	5360 5361	
	5362 5363	
	5365 5366	

n	On / T	Off / T
664	5367 5368	
	5372 5373	
	5374 / 415	
663	581 1061	1 5326 5351
	1063 / 3	5353 / 4
662	/ 0	1061 / 1
661	1 1061 / 2	571 1049
		1051 / 3
660	5321 5347	1 5336 5363
	5375 / 3	5365 / 4
659	566 1045 / 2	581 1061
		1063 / 3
658	1 / 1	566 1045 / 2
657	561 1039	1 5321 5347
	1067 / 3	5375 / 4
656	5336 5365 /	561 1039
	2	1067 / 3
655	1 / 1	5336 5365 /
		2
654	/ 0	1 / 1
653	/ 0	5356 / 1
652	/ 0	3825 / 1
651	3825 5356 /	1040 1041
	2	1042 / 3
650	/ 0	1701 / 1
649	1 8 9 10 11	962 1013
	12 13 30 31	1018 1023
	32 33 34 35	1028 1033
	36 37 38 39	1046 1047
	40 41 42 43	1048 1064
	44 45 46 47	1065 1066
	48 49 50 51	1624 1625
	52 53 54 55	1626 1627
	107 108 109	1628 1629
	110 111 112	1630 1631
	113 114 115	1632 1633
	116 117 118	1634 1635
	119 120 121	1636 1637
	122 123 124	1638 1639
	125 126 127	1640 1641
	128 129 130	1642 1643
	131 132 133	1644 1645
	134 135 136	1646 1647
	137 138 139	1648 1649
	140 141 142	1650 1651
	143 144 145	1652 1653
	146 147 148	1654 1655
	149 150 151	1656 1657
	152 153 154	1658 1659
	155 156 157	1660 1661
	158 159 160	1662 1663
	161 162 163	1664 1665

n	On / T	Off / T
649	164 165 166	1666 1667
	167 279 280	1668 1669
	281 282 283	1670 1671
	284 285 286	1672 1673
	287 288 289	1674 1675
	290 291 292	1676 1677
	293 294 295	1678 1679
	296 297 298	1680 1681
	299 300 301	1682 1683
	302 303 304	1684 1685
	305 306 307	1686 1687
	308 309 310	1688 1689
	311 312 313	1690 1691
	314 315 316	1692 1693
	317 318 319	1694 1695
	320 321 322	1696 1697
	323 324 325	1698 1699
	326 327 328	1702 1703
	329 330 331	1704 1705
	332 333 334	1707 1708
	335 336 337	1709 1710
	338 339 340	1711 1713
	341 342 343	1714 1715
	344 345 346	1716 1717
	347 348 349	1719 1720
	350 351 352	1721 1722
	353 354 355	1723 1725
	356 357 358	1726 1727
	359 360 361	1728 1729
	362 363 364	2536 2537
	365 366 367	2538 2539
	368 369 370	2540 2541
	371 372 373	2542 2543
	374 375 376	2544 2545
	377 378 379	2546 2547
	380 381 382	2548 2549
	383 384 385	2550 2551
	386 387 388	2552 2553
	389 561 566	2554 2555
	571 576 581	2556 2557
	586 587 588	2558 2559
	589 590 591	2560 2561
	592 593 594	2562 2563
	595 596 597	2564 2565
	598 599 600	2566 2567
	601 602 603	2568 2569
	604 605 606	2570 2571
	607 608 609	2572 2573
	610 611 612	2574 2575
	613 614 615	2576 2577
	616 617 618	2578 2579
	619 620 621	2580 2581
	622 623 624	2582 2583

Table 51: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
649	625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 687 688 689 690 692 693 694 695 697 698 699 700 702 703 704 705 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 1081 1082 1083 1084 1087 1088 1089 1090 1111 1112 1113 1117 1118 1119 1141 1142 1147 1148 / 398	2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2613 2614 2615 2616 2617 2619 2620 2621 2622 2623 2625 2626 2627 2628 2629 2631 2632 2633 2634 2635 2637 2638 2639 2640 2641 3738 3739 3740 3741 3742 3743 3744 3745 3746 3747 3748 3749 3750 3751 3752 3753 3754 3755 3756 3757 3758 3759 3760 3761 3762 3763 3764 3765 3766 3767 3768 3769 3770 3771 3772 3773 3774 3775 3776 3777 3778 3779 3780 3781 3782 3783 3784 3785 3786 3787 3788 3789 3790
649		3791 3792 3793 3794 3795 3796 3797 3798 3799 3800 3801 3802 3803 3804 3805 3806 3807 3808 3809 3810 3811 3812 3813 3815 3816 3817 3818 3819 3821 3822 3823 3824 3825 3827 3828 3829 3830 3831 3833 3834 3835 3836 3837 3839 3840 3841 3842 3843 5271 5272 5273 5274 5275 5276 5277 5278 5279 5280 5281 5282 5283 5284 5285 5286 5287 5288 5289 5290 5291 5292 5293 5294 5295 5296 5297 5298 5299 5300 5301 5302 5303 5304 5305 5306 5307 5308 5309 5310 5311 5312 5313 5314 5315 5316 5317 5318 5319 5320 5322 5323 5324 5325 5327 5328 5329 5330
649		5332 5333 5334 5335 5337 5338 5339 5340 5342 5343 5344 5345 5348 5349 5350 5354 5355 5356 5360 5361 5362 5366 5367 5368 5372 5373 5374 / 399
648	/ 0	1 / 1
647	1 / 1	1147 1148 / 2
646	686 691 696 701 706 761 962 1028 1055 / 9	1058 1059 1060 1087 1088 1089 1090 1117 1118 1119 / 10
645	/ 0	962 / 1
644	962 / 1	1028 1055 / 2
643	/ 0	962 / 1
642	/ 0	761 / 1
641	/ 0	686 / 1
640	/ 0	706 / 1
639	/ 0	691 / 1
638	/ 0	701 / 1
637	/ 0	696 / 1
636	/ 0	1 / 1
635	1 / 1	1141 1142 / 2
634	/ 0	1 / 1
633	1 686 691 696 701 706 761 962 1013 / 9	1052 1053 1054 1081 1082 1083 1084 1111 1112 1113 / 10
632	/ 0	1013 / 1
631	/ 0	962 / 1
630	/ 0	761 / 1
629	/ 0	701 / 1
628	/ 0	706 / 1
627	/ 0	696 / 1
626	/ 0	691 / 1
625	/ 0	686 / 1
624	/ 0	1 / 1
623	/ 0	561 / 1
622		1005 1027

Table 52: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
622	1 561 / 2	1029 / 3
621	/ 0	576 / 1
620	/ 0	1 / 1
619	/ 0	571 / 1
618	1 576 / 2	1001 1022 1024 / 3
617	/ 0	576 / 1
616	/ 0	1 / 1
615	1 / 1	1025 1026 / 2
614	/ 0	1 / 1
613	1 1025 1026 / 3	581 1009 1032 1034 / 4
612	/ 0	1 / 1
611	1 / 1	1025 1026 / 2
610	1025 1026 / 2	1 1030 1031 / 3
609	1 / 1	1025 1026 / 2
608	/ 0	1 / 1
607	1 1025 1026 / 3	561 993 1014 1037 / 4
606	/ 0	1 / 1
605	1 / 1	1035 1036 / 2
604	561 571 576 581 686 691 696 1001 1022 1024 1046 1047 1048 1075 1076 1077 1078 1105 1106 1107 1135 1136 / 22	963 964 965 966 967 968 974 975 976 977 978 987 988 989 990 991 992 1006 1007 1008 1010 1011 1012 / 23
603	/ 0	686 / 1
602	/ 0	696 / 1
601	/ 0	581 / 1
600	/ 0	691 / 1
599	/ 0	576 / 1
598	/ 0	561 / 1
597	/ 0	1 / 1
596	1 561 576 581 686 691 696 706 761 1018 1045 / 11	972 973 984 985 986 1001 1002 1003 1004 1024 1025 1026 / 12
595	701 / 1	1018 1045 / 2
594	/ 0	701 / 1
593	/ 0	706 / 1
592	/ 0	761 / 1
591	/ 0	696 / 1
590	/ 0	581 / 1
589	/ 0	576 / 1
588	/ 0	686 / 1
587	/ 0	691 / 1
586	/ 0	561 / 1
585	/ 0	1 / 1
584	1 561 576 581 686 691 696 701 706 761 1165 / 11	969 970 979 980 981 994 995 996 997 1015 1016 1017 / 12
583	/ 0	1165 / 1
582	/ 0	971 / 1
581	/ 0	706 / 1
580	/ 0	701 / 1
579	/ 0	581 / 1
578	/ 0	761 / 1
577	/ 0	561 / 1
576	/ 0	686 / 1
575	/ 0	696 / 1
574	/ 0	576 / 1
573	/ 0	691 / 1
572	/ 0	510 / 1
571	576 581 686 691 696 701 706 761 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 / 20	982 983 998 999 1000 1019 1020 1021 1022 1046 1047 1048 1075 1076 1077 1078 1105 1106 1107 1135 1136 / 21
570	510 561 1255 1256 1257 1278 1279 1280 1297 1298 1311 / 11	1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 / 12
569	/ 0	1311 / 1
568	/ 0	1257 / 1
567	/ 0	581 / 1
566	/ 0	510 / 1
565	/ 0	561 / 1
564	510 561 581 1586 1587 1590 / 6	1255 1256 1278 1279 1280 1297 1298 / 7
563	/ 0	1587 / 1
562	995 / 1	1586 1590 / 2
561	/ 0	995 / 1
560	/ 0	761 / 1
559	/ 0	686 / 1
558	/ 0	691 / 1
557	/ 0	696 / 1
556	/ 0	706 / 1
555	/ 0	701 / 1
554	/ 0	566 / 1
553	/ 0	571 / 1
552	/ 0	561 / 1
551	/ 0	576 / 1
550	/ 0	581 / 1
549	/ 0	510 / 1
548	/ 0	1 / 1
547	/ 0	760 / 1
546	/ 0	759 / 1
545	1 510 / 2	756 757 758 / 3
544	/ 0	510 / 1
543	/ 0	1 / 1
542	/ 0	754 / 1
541	1 754 / 2	705 707 727 / 3
540	510 / 1	681 682 / 2
539	/ 0	510 / 1
538	/ 0	743 / 1
537	/ 0	754 / 1
536	743 754 / 2	687 710 711 / 3
535	571 / 1	661 662 / 2
534	/ 0	571 / 1
533	510 571 661 662 681 682 687 705 757 758 759 / 11	708 709 728 729 730 731 743 744 745 746 754 755 / 12
532	/ 0	571 / 1
531	/ 0	510 / 1
530	510 571 / 2	757 758 759 / 3
529	/ 0	571 / 1
528	/ 0	510 / 1
527	510 571 / 2	681 682 705 / 3
526	/ 0	510 / 1
525	/ 0	571 / 1
524	571 576 / 2	661 662 687 / 3
523	/ 0	571 / 1
522	/ 0	

Table 53: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
522		576 / 1
521	/ 0	683 / 1
520	576 / 1	684 685 / 2
519	/ 0	576 / 1
518	/ 0	636 / 1
517	510 571 576 696 757 758 759 / 7	586 610 611 634 635 658 659 660 / 8
516	/ 0	510 / 1
515	/ 0	696 / 1
514	/ 0	576 / 1
513	/ 0	571 / 1
512	571 576 / 2	757 758 759 / 3
511	/ 0	571 / 1
510	/ 0	576 / 1
509	571 576 / 2	541 562 585 / 3
508	/ 0	571 / 1
507	/ 0	576 / 1
506	/ 0	747 / 1
505	576 / 1	712 732 / 2
504	/ 0	576 / 1
503	/ 0	688 / 1
502	510 541 562 571 576 581 585 / 7	689 690 713 714 715 733 734 748 / 8
501	/ 0	581 / 1
500	/ 0	510 / 1
499	/ 0	571 / 1
498	/ 0	576 / 1
497	571 576 / 2	541 562 585 / 3
496	/ 0	571 / 1
495	/ 0	576 / 1
494	571 576 / 2	666 667 692 / 3
493	/ 0	571 / 1
492	/ 0	576 / 1
491	/ 0	339 / 1
490	339 576 / 2	637 638 663 / 3
489	/ 0	576 / 1
488	/ 0	339 / 1
487	339 / 1	587 612 / 2
486	/ 0	339 / 1
485	339 510 541 571 576 581 585 667 681 692 696 701 705 758 759 / 15	563 564 565 588 589 590 591 613 614 615 616 639 640 641 664 665 / 16
484	/ 0	339 / 1
483		

n	On / T	Off / T
483	339 / 1	541 585 / 2
482	/ 0	339 / 1
481	339 / 1	758 759 / 2
480	/ 0	339 / 1
479	339 / 1	545 567 / 2
478	/ 0	339 / 1
477	339 / 1	681 705 / 2
476	/ 0	339 / 1
475	339 / 1	667 692 / 2
474	/ 0	339 / 1
473	/ 0	510 / 1
472	/ 0	581 / 1
471	/ 0	701 / 1
470	/ 0	696 / 1
469	/ 0	571 / 1
468	/ 0	576 / 1
467	/ 0	657 / 1
466	576 / 1	609 633 / 2
465	/ 0	576 / 1
464	/ 0	656 / 1
463	/ 0	584 / 1
462	339 510 571 576 696 701 / 6	582 583 606 607 608 631 632 / 7
461	/ 0	339 / 1
460	/ 0	701 / 1
459	/ 0	510 / 1
458	/ 0	571 / 1
457	/ 0	696 / 1
456	/ 0	576 / 1
455	571 576 / 2	557 580 605 / 3
454	/ 0	571 / 1
453	/ 0	576 / 1
452	/ 0	355 / 1
451	355 576 / 2	526 542 560 / 3
450	/ 0	576 / 1
449	/ 0	259 / 1
448	259 / 1	543 544 / 2
447	526 542 543 544 560 / 5	355 680 704 726 742 753 / 6
446	355 510 557 571 576 580 605 / 7	702 703 723 724 725 740 741 752 / 8
445	/ 0	510 / 1
444	/ 0	571 / 1
443	339 510 545 567 571 667 692 696 / 8	605 629 630 653 654 655 677 678 679 / 9
442	/ 0	355 / 1
441		

n	On / T	Off / T
441	355 / 1	667 692 / 2
440	/ 0	339 / 1
439	339 / 1	557 580 / 2
438	557 580 / 2	339 545 567 / 3
437	339 / 1	557 580 / 2
436	/ 0	339 / 1
435	339 / 1	676 700 / 2
434	/ 0	339 / 1
433	/ 0	355 / 1
432	/ 0	510 / 1
431	/ 0	696 / 1
430	/ 0	576 / 1
429	/ 0	571 / 1
428	/ 0	259 / 1
427	259 571 / 2	749 750 751 / 3
426	/ 0	571 / 1
425	/ 0	389 / 1
424	389 / 1	722 739 / 2
423	/ 0	389 / 1
422	389 / 1	716 735 / 2
421	339 355 510 571 576 716 735 / 7	697 698 699 719 720 721 737 738 / 8
420	/ 0	355 / 1
419	/ 0	339 / 1
418	339 355 541 545 557 567 580 / 7	693 694 695 716 717 718 735 736 / 8
417	/ 0	541 / 1
416	/ 0	339 / 1
415	339 / 1	545 567 / 2
414	/ 0	339 / 1
413	339 / 1	671 672 / 2
412	/ 0	389 / 1
411	389 / 1	557 580 / 2
410	/ 0	389 / 1
409	/ 0	355 / 1
408	/ 0	339 / 1
407	/ 0	510 / 1
406	/ 0	576 / 1
405	/ 0	571 / 1
404	/ 0	343 / 1
403	343 510 / 2	642 643 668 / 3
402	/ 0	510 / 1
401	/ 0	343 / 1
400	343 / 1	592 617 / 2
399	592 617 / 2	343 669 670 / 3
398	343 / 1	592 617 / 2
397	/ 0	343 / 1
396		

Table 54: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
396	339 343 355 510 576 592 617 / 7	595 596 619 620 621 644 645 646 / 8
395	/ 0	339 / 1
394	596 620 621 644 645 646 669 670 / 8	355 568 569 570 592 593 594 617 618 / 9
393	/ 0	510 / 1
392	339 355 389 510 545 557 580 / 7	596 620 621 644 645 646 669 670 / 8
391	/ 0	545 / 1
390	/ 0	389 / 1
389	389 / 1	549 572 / 2
388	/ 0	389 / 1
387	389 / 1	557 580 / 2
386	/ 0	339 / 1
385	/ 0	389 / 1
384	/ 0	355 / 1
383	/ 0	343 / 1
382	/ 0	510 / 1
381	/ 0	576 / 1
380	/ 0	259 / 1
379	259 510 / 2	651 652 675 / 3
378	/ 0	510 / 1
377	/ 0	351 / 1
376	351 / 1	673 674 / 2
375	/ 0	351 / 1
374	351 / 1	647 648 / 2
373	/ 0	351 / 1
372	339 343 351 355 389 510 / 6	600 601 624 625 626 649 650 / 7
371	/ 0	389 / 1
370	/ 0	339 / 1
369	/ 0	355 / 1
368	339 355 389 545 549 572 647 / 7	577 578 579 602 603 604 627 628 / 8
367	/ 0	545 / 1
366	/ 0	647 / 1
365	/ 0	389 / 1
364	389 / 1	549 572 / 2
363	/ 0	389 / 1
362	389 / 1	553 575 / 2
361	/ 0	389 / 1
360	/ 0	355 / 1
359	/ 0	339 / 1
358	339 355 389 / 3	597 599 622 623 / 4
357	541 557 / 2	573 574 598 / 3
356	/ 0	557 / 1
355	/ 0	541 / 1
354	/ 0	389 / 1
353	/ 0	343 / 1
352	/ 0	347 / 1
351	/ 0	351 / 1
350	/ 0	355 / 1
349	/ 0	339 / 1
348	/ 0	510 / 1
347	/ 0	259 / 1
346	259 339 / 2	535 552 554 / 3
345	/ 0	339 / 1
344	/ 0	271 / 1
343	271 / 1	555 556 / 2
342	/ 0	271 / 1
341	271 / 1	538 558 / 2
340	339 343 347 351 355 389 / 6	514 515 522 523 524 536 537 / 7
339	/ 0	389 / 1
338	/ 0	351 / 1
337	351 389 892 894 895 896 897 898 899 900 901 932 933 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 / 30	511 512 513 516 517 518 519 520 521 525 526 527 528 529 530 531 532 533 534 539 540 542 543 544 546 547 548 550 551 559 560 / 31
336	/ 0	263 / 1
335	263 / 1	932 942 / 2
334	932 942 / 2	263 892 944 / 3
333	263 / 1	932 942 / 2
332	523 524 525 536 537 538 539 540 554 555 556 557 558 559 560 582 583 584 607 608 609 632 633 / 23	894 895 896 897 898 899 900 901 933 935 936 937 938 939 940 941 943 945 946 947 948 949 950 951 / 24
331	/ 0	554 / 1
330	/ 0	343 / 1
329	343 / 1	557 582 / 2
328	882 884 885 886 887 888 889 890 891 922 923 924 925 926 927 928 929 930 931 / 19	523 524 525 536 537 538 539 540 555 556 558 559 560 583 584 607 608 609 632 633 / 20
327	/ 0	924 / 1
326	/ 0	347 / 1
325	347 / 1	884 923 / 2
324	/ 0	389 / 1
323	389 523 524 525 536 537 538 539 540 554 555 556 558 559 560 / 15	882 885 886 887 888 889 890 891 922 925 926 927 928 929 930 931 / 16
322	/ 0	560 / 1
321	/ 0	554 / 1
320	/ 0	389 / 1
319	/ 0	343 / 1
318	343 389 922 923 925 926 927 928 929 930 931 / 11	523 524 525 536 537 538 539 540 555 556 558 559 / 12
317	/ 0	922 / 1
316	/ 0	923 / 1
315	525 539 540 558 559 560 / 6	925 926 927 928 929 930 931 / 7
314	/ 0	525 / 1
313	/ 0	560 / 1
312	/ 0	558 / 1
311	/ 0	559 / 1
310	768 / 1	539 540 / 2
309	/ 0	768 / 1
308	/ 0	389 / 1
307	/ 0	343 / 1
306	/ 0	347 / 1
305	/ 0	267 / 1
304	/ 0	263 / 1
303	/ 0	339 / 1
302	/ 0	271 / 1
301	/ 0	228 / 1
300	/ 0	351 / 1
299	/ 0	275 / 1
298	/ 0	355 / 1
297	/ 0	259 / 1
296	/ 0	320 / 1
295	/ 0	319 / 1
294	/ 0	358 / 1
293	271 / 1	340 359 / 2
292	/ 0	271 / 1
291	/ 0	299 / 1
290	/ 0	279 / 1
289		

Table 55: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
289	267 271 320 340 347 351 359 / 7	298 317 318 336 337 338 356 357 / 8
288	/ 0	351 / 1
287	/ 0	267 / 1
286	/ 0	271 / 1
285	/ 0	347 / 1
284	271 347 / 2	320 340 359 / 3
283	/ 0	347 / 1
282	228 267 275 343 347 351 389 / 7	260 261 262 280 281 282 300 301 / 8
281	/ 0	343 / 1
280	343 / 1	244 278 / 2
279	/ 0	343 / 1
278	/ 0	389 / 1
277	/ 0	275 / 1
276	/ 0	228 / 1
275	/ 0	351 / 1
274	/ 0	267 / 1
273	/ 0	347 / 1
272	/ 0	271 / 1
271	228 267 271 275 347 351 389 / 7	283 302 303 321 322 323 341 342 / 8
270	244 278 / 2	247 264 389 / 3
269	389 / 1	244 278 / 2
268	/ 0	228 / 1
267	/ 0	389 / 1
266	/ 0	275 / 1
265	/ 0	267 / 1
264	/ 0	351 / 1
263	228 244 247 264 267 275 278 351 / 8	360 361 362 373 374 375 376 384 385 / 9
262	/ 0	137 / 1
261	137 360 361 362 373 374 375 376 384 385 389 / 11	228 229 230 234 235 236 244 245 246 247 264 278 / 12
260	/ 0	389 / 1
259	228 229 230 234 235 236 244 245 246 247 264 278 / 12	360 361 362 371 372 373 374 375 376 383 384 385 388 / 13
258	/ 0	382 / 1
257	/ 0	137 / 1
256	137 / 1	324 344 / 2
255	/ 0	

n	On / T	Off / T
255		137 / 1
254	137 / 1	335 354 / 2
253	/ 0	137 / 1
252	137 / 1	386 387 / 2
251	/ 0	137 / 1
250	137 / 1	247 264 / 2
249	/ 0	137 / 1
248	137 / 1	244 278 / 2
247	/ 0	137 / 1
246	/ 0	267 / 1
245	/ 0	347 / 1
244	137 244 278 335 347 354 / 6	265 266 284 285 286 304 305 / 7
243	/ 0	137 / 1
242	137 386 387 / 3	244 278 335 354 / 4
241	/ 0	137 / 1
240	137 / 1	386 387 / 2
239	/ 0	137 / 1
238	244 247 260 261 262 264 265 266 278 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 542 543 544 546 547 548 550 551 552 554 555 556 558 559 560 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 994 995 996 998 999 1000 1002 1003 1004 1006	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 271 275 287 288 289 290 291 292 293 294 295 296 297 306 307 308

n	On / T	Off / T
238	1007 1008 1010 1011 1012 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1656 1657 1658 1660 1661 1662 1664 1665 1666 1668 1669 1670 1672 1673 1674 / 147	309 310 311 312 313 314 315 316 325 326 327 328 329 330 331 332 333 334 345 346 347 348 349 350 351 352 353 363 364 365 366 367 368 369 370 377 378 379 380 381 / 148
237	/ 0	1624 / 1
236	/ 0	1 / 1
235	1 8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157	510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 542 543 544 546 547 548 550 551 552 554 555 556 558 559 560 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990

Table 56: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
235	158 159 160 161 162 163 164 165 166 167 267 271 275 280 281 284 285 286 287 288 289 290 291 292 293 294 295 296 297 304 305 306 307 308 309 310 311 312 313 314 315 316 325 326 327 328 329 330 331 332 333 334 / 136	991 992 994 995 996 998 999 1000 1002 1003 1004 1006 1007 1008 1010 1011 1012 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1656 1657 1658 1660 1661 1662 1664 1665 1666 1668 1669 1670 1672 1673 1674 / 137
234	/ 0	167 / 1
233	167 / 1	327 328 / 2
232	324 327 328 335 / 4	260 261 262 280 281 / 5
231	/ 0	335 / 1
230	/ 0	324 / 1
229	/ 0	167 / 1
228	167 / 1	327 328 / 2
227	/ 0	167 / 1
226	167 / 1	331 332 / 2
225	/ 0	167 / 1
224	167 / 1	244 278 / 2
223	/ 0	167 / 1
222	167 / 1	247 264 / 2
221	/ 0	137 / 1
220	/ 0	167 / 1
219	137 167 244 247 264 278 327 328 / 8	275 294 295 313 314 315 316 333 334 / 9
218	/ 0	167 / 1
217	167 / 1	244 278 / 2
216		
216	244 324 331 / 3	276 277 296 297 / 4
215	/ 0	331 / 1
214	/ 0	324 / 1
213	/ 0	244 / 1
212	/ 0	137 / 1
211	137 / 1	327 328 / 2
210	/ 0	167 / 1
209	167 / 1	256 274 / 2
208	/ 0	149 / 1
207	149 / 1	247 264 / 2
206	/ 0	149 / 1
205	/ 0	167 / 1
204	/ 0	137 / 1
203	/ 0	271 / 1
202	137 149 167 247 264 327 328 / 7	272 273 291 292 293 311 312 330 / 8
201	/ 0	149 / 1
200	149 / 1	327 328 / 2
199	244 324 327 / 3	290 309 310 329 / 4
198	/ 0	244 / 1
197	/ 0	324 / 1
196	/ 0	327 / 1
195	/ 0	167 / 1
194	167 / 1	247 264 / 2
193	/ 0	149 / 1
192	244 247 256 260 261 262 264 272 273 274 276 277 278 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 542 543 544 546 547 548 550 551 552 554 555 556 558 559 560 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 150 151 152 153 154 155 156 157 158 159
192	978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 994 995 996 998 999 1000 1002 1003 1004 1006 1007 1008 1010 1011 1012 / 105	160 161 162 163 164 165 166 167 267 284 285 286 287 288 289 304 305 306 307 308 325 326 / 106
191	/ 0	962 / 1
190	/ 0	1 / 1
189	1 962 / 2	101 270 272 / 3
188	/ 0	1 / 1
187	1 8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 101 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 280 281 284 285 300 / 100	253 256 268 269 273 274 276 277 278 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 542 543 544 546 547 548 550 551 552 554 555 556 558 559 560 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 994 995 996 998 999 1000 1002 1003 1004 1006 1007 1008 1010 1011 1012 / 101
186	/ 0	

Table 57: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
186		300 / 1
185	/ 0	167 / 1
184	167 253 256 304 / 4	260 261 262 280 281 / 5
183	/ 0	256 / 1
182	/ 0	244 / 1
181	/ 0	253 / 1
180	/ 0	304 / 1
179	/ 0	167 / 1
178	167 390 391 392 393 394 395 414 415 416 417 418 419 438 439 440 441 442 443 462 463 464 465 466 467 486 487 488 489 490 491 / 31	229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 245 246 247 248 249 250 251 252 254 255 257 258 264 265 266 284 285 / 32
177	/ 0	228 / 1
176	228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 248 249 251 252 253 254 255 256 257 258 / 29	390 391 392 393 394 395 414 415 416 417 418 419 438 439 440 441 442 443 462 463 464 465 466 467 486 487 488 489 490 491 / 30
175	/ 0	253 / 1
174	/ 0	244 / 1
173	/ 0	256 / 1
172	/ 0	167 / 1
171	/ 0	149 / 1
170	/ 0	146 / 1
169	/ 0	143 / 1
168	143 146 149 167 438 440 441 442 443 462 463 464 465 466 467 469 470 471 472 473 486 487 489 490 491 / 25	228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 245 246 248 249 251 252 254 255 257 258 / 26
167	/ 0	137 / 1
166	137 / 1	487 489 / 2
165	439 468 / 2	486 490 491 / 3
164	/ 0	468 / 1
163	/ 0	

n	On / T	Off / T
163		439 / 1
162	/ 0	140 / 1
161	140 / 1	464 470 / 2
160	464 / 1	472 473 / 2
159	439 / 1	469 471 / 2
158	/ 0	464 / 1
157	/ 0	439 / 1
156	/ 0	167 / 1
155	167 / 1	440 463 / 2
154	241 242 243 254 255 257 258 / 7	438 441 442 443 462 465 466 467 / 8
153	486 487 488 489 490 491 / 6	241 242 243 254 255 257 258 / 7
152	/ 0	486 / 1
151	/ 0	487 / 1
150	241 254 255 / 3	488 489 490 491 / 4
149	/ 0	255 / 1
148	/ 0	241 / 1
147	/ 0	254 / 1
146	/ 0	167 / 1
145	/ 0	137 / 1
144	/ 0	149 / 1
143	/ 0	146 / 1
142	/ 0	104 / 1
141	/ 0	92 / 1
140	/ 0	140 / 1
139	/ 0	143 / 1
138	/ 0	95 / 1
137	/ 0	76 / 1
136	/ 0	98 / 1
135	/ 0	101 / 1
134	92 95 104 137 149 167 / 6	99 100 113 114 115 128 129 / 7
133	/ 0	167 / 1
132	140 146 167 / 3	80 86 87 88 / 4
131	/ 0	79 / 1
130	/ 0	140 / 1
129	140 / 1	102 116 / 2
128	/ 0	104 / 1
127	104 / 1	97 112 / 2
126	/ 0	140 / 1
125	97 102 116 / 3	126 127 141 142 / 4
124	/ 0	97 / 1
123	/ 0	95 / 1
122	95 / 1	102 116 / 2
121	/ 0	95 / 1
120	102 116 / 2	96 111 125 / 3

n	On / T	Off / T
119	/ 0	110 / 1
118	/ 0	85 / 1
117	/ 0	84 / 1
116	/ 0	78 / 1
115	/ 0	24 / 1
114	24 / 1	102 116 / 2
113	/ 0	24 / 1
112	24 / 1	144 156 / 2
111	/ 0	130 / 1
110	102 156 / 2	131 145 146 / 3
109	/ 0	102 / 1
108	/ 0	156 / 1
107	/ 0	24 / 1
106	24 / 1	77 81 / 2
105	/ 0	89 / 1
104	76 77 78 79 80 81 84 85 86 87 88 89 96 97 99 100 102 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 248 249 251 252 254 255 257 258 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 530 531 533 534 536 537 539 540 / 71	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 104 107 108 109 117 118 119 120 121 122 123 124 132 133 134 135 136 137 138 139 147 148 149 150 151 152 153 154 155 157 158 159 160 161 162 163 164 165 166 167 / 72
103	8 12 30 31 38 39 40 48 49 107 108 109 119 120 121 122 123 134 135 136 149 150 151 259 260 261 277 278 279 280 281 296 297 298 299 300 316 317 318 336 337 338 541 542 543	5 6 17 18 23 24 25 26 27 76 79 80 85 86 87 88 89 96 97 99 100 102 103 228 229 230 231 232 233 236 237 238 239 240 241 242 248 249 251 252 254 255 510 511 512 513 514 515

Table 58: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
103	559 560 561 562 563 584 585 586 587 588 608 609 610 611 612 633 634 635 659 660 / 65	516 517 518 519 520 521 522 523 524 525 528 530 531 533 534 536 537 539 / 66
102	/ 0	149 / 1
101	5 6 9 10 11 13 17 18 23 24 25 26 27 32 33 34 35 36 37 41 42 43 44 45 46 47 50 51 52 53 54 55 76 79 80 85 86 87 88 89 95 96 97 110 111 124 125 137 138 139 152 153 161 162 / 54	119 134 234 235 243 244 245 246 257 258 259 260 261 277 278 279 280 281 296 297 298 299 300 316 317 318 336 337 338 526 527 540 541 542 543 559 560 561 562 563 584 585 586 587 588 608 609 610 611 612 633 634 635 659 660 / 55
100	/ 0	162 / 1
99	/ 0	88 / 1
98	390 391 392 393 394 395 397 398 399 400 401 414 415 417 418 419 486 488 489 490 491 516 526 527 542 543 563 564 767 770 / 30	10 11 13 26 34 35 36 37 42 43 44 45 46 47 48 50 51 52 53 54 55 125 135 137 138 139 150 151 152 153 161 / 31
97	10 11 13 26 34 35 36 37 42 43 44 45 46 47 48 50 51 52 53 54 55 135 137 138 150 151 152 153 161 / 29	390 391 392 393 394 395 397 398 399 400 401 414 415 417 418 419 486 488 489 490 491 516 526 527 542 543 563 564 767 770 / 30
96	/ 0	153 / 1
95	88 125 139	137 150 151
95	153 / 4	152 161 / 5
94	/ 0	88 / 1
93	112 126 127 / 3	135 138 139 153 / 4
92	88 135 / 2	112 126 127 / 3
91	/ 0	125 / 1
90	/ 0	135 / 1
89	/ 0	88 / 1
88	/ 0	55 / 1
87	55 / 1	90 105 / 2
86	105 125 135 / 3	76 80 81 89 / 4
85	168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 216 217 218 219 220 221 / 30	77 78 79 82 83 84 85 86 87 91 92 93 94 95 96 97 105 106 107 108 109 110 111 120 121 122 123 124 125 135 136 / 31
84	89 90 91 103 104 105 106 107 108 117 118 119 120 121 122 132 133 134 135 136 147 148 149 150 151 159 160 161 166 / 29	168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 216 217 218 219 220 221 / 30
83	81 102 / 2	107 108 122 / 3
82	/ 0	151 / 1
81	174 175 176 177 178 179 204 205 206 207 208 209 216 217 218 219 220 221 222 223 224 225 226 227 / 24	81 89 90 91 102 103 105 106 117 118 119 120 121 132 133 134 135 136 147 148 150 159 160 161 166 / 25
80	/ 0	104 / 1
79	/ 0	149 / 1
78	/ 0	42 / 1
77	76 77 78 79 80 81 82 83 84 85 86 87	8 9 10 11 12 13 30 31 32 33 34 35 36
77	88 89 90 91 93 94 95 96 97 99 100 102 103 105 106 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 245 246 247 248 249 251 252 254 255 257 258 / 54	37 38 39 40 41 43 44 45 46 47 48 49 50 51 52 53 54 55 174 175 176 177 178 179 204 205 206 207 208 209 216 217 218 219 220 221 222 223 224 225 226 227 / 55
76	/ 0	247 / 1
75	/ 0	95 / 1
74	8 9 10 11 12 13 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 168 169 170 180 181 182 192 193 194 195 196 197 204 205 206 216 217 218 / 50	77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 93 94 96 97 99 100 102 103 105 106 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 245 246 248 249 251 252 254 255 257 258 / 51
73	/ 0	195 / 1
72	240 / 1	196 197 / 2
71	/ 0	240 / 1
70	/ 0	76 / 1
69	/ 0	55 / 1
68	55 76 / 2	182 193 194 / 3
67	182 / 1	76 192 / 2
66	/ 0	205 / 1
65	184 185 / 2	204 206 217 / 3
64	217 / 1	184 185 / 2
63	/ 0	182 / 1
62	/ 0	217 / 1
61	217 / 1	180 181 / 2
60	/ 0	170 / 1
59	/ 0	217 / 1
58	170 / 1	216 218 / 2
57	/ 0	170 / 1
56	83 / 1	168 169 / 2
55	/ 0	83 / 1
54	/ 0	

Table 59: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

n	On / T	Off / T
54		55 / 1
53	/ 0	44 / 1
52	/ 0	46 / 1
51	/ 0	26 / 1
50	55 / 1	35 45 / 2
49	/ 0	36 / 1
48	/ 0	28 / 1
47	/ 0	37 / 1
46	/ 0	27 / 1
45	/ 0	24 / 1
44	/ 0	25 / 1
43	/ 0	34 / 1
42	/ 0	18 / 1
41	/ 0	14 / 1
40	/ 0	17 / 1
39	/ 0	19 / 1
38	77 78 82 83 84 93 94 229 230 234 235 236 244 245 246 247 260 261 262 516 517 518 526 527 528 529 542 543 544 563 564 979 980 994 995 996 1015 1016 / 38	1 2 3 4 5 6 7 8 9 10 11 12 13 15 16 20 21 22 23 29 30 31 32 33 38 39 40 41 42 43 47 48 49 50 51 52 53 54 55 / 39
37	1 2 3 4 5 6 7 8 9 10 11 12 13 16 21 22 23 30 31 32 33 34 38 39 40 41 42 43 47 48 49 50 51 52 53 54 55 / 37	77 78 82 83 84 93 94 229 230 234 235 236 244 245 246 247 260 261 262 516 517 518 526 527 528 529 542 543 544 563 564 979 980 994 995 996 1015 1016 / 38
36	/ 0	34 / 1
35	/ 0	16 / 1
34	45 / 1	22 23 / 2
33	/ 0	21 / 1
32	/ 0	45 / 1
31	/ 0	33 / 1
30	20 56 57 58 59 61 62 63 66 67 72 73 74 75 / 14	30 31 32 38 39 41 43 47 49 50 51 52 53 54 55 / 15
29	22 60 / 2	42 66 67 / 3
28	/ 0	

n	On / T	Off / T
28		72 / 1
27	/ 0	20 / 1
26	20 72 / 2	48 74 75 / 3
25	/ 0	60 / 1
24	/ 0	22 / 1
23	/ 0	61 / 1
22	/ 0	40 / 1
21	/ 0	63 / 1
20	/ 0	62 / 1
19	/ 0	59 / 1
18	/ 0	20 / 1
17	60 / 1	57 58 / 2
16	/ 0	60 / 1
15	/ 0	56 / 1
14	/ 0	72 / 1
13	/ 0	73 / 1
12	/ 0	13 / 1
11	/ 0	9 / 1
10	/ 0	8 / 1
9	/ 0	10 / 1
8	/ 0	12 / 1
7	/ 0	11 / 1
6	11 68 / 2	3 4 6 / 3
5	6 / 1	11 68 / 2
4	/ 0	5 / 1
3	/ 0	1 / 1
2	/ 0	6 / 1

Table 60: i_p of the particles in MIF1739, to build C_n from C_{n+1} (cont.)

7 Conclusions and future work

All the details of the construction of the IF9483 and MIF1739 are not given here but in a later article. Our first option was to build only Ω^o from Propositions1 and 3 but it was not as regular and symmetrical as IF. IF was the lattice that close the gap of Northby's statement [17] in a regular, elegant and symmetrical lattice but hot. It seems that Proposition 1 is focus in build arbitrary sets from arbitrary points, that can be obtained from the separable points of $\mathbb{R}^3$ under BU or LJ. However, IF came naturally from using the C^*_{13} as the seed. Of course, there could be other sets or lattices without such motifs but IF joints in one framework the well know IC and FC and all the putative optimal LJ clusters. Also, in the sets Ω^l and Ω^o of the Propositions 2 and 3 are not necessary a minimization procedure for any cluster. This gives a witness property for the optimality verification in the neighborhood of a cluster in polynomial time. Depicting the components of the gradient of the potential on each particle helps to understand the deformation of the PES for small clusters, but it need further study. Propositions 1, 2, and 3 permit see SOCDXX as the Traveling Salesman Problem in Ω^l or Ω^o and let to have a framework to analyze the complexity of SOCDXX where XX is BU or LJ. An open question is: Are there similar results for Kihara or Morse Potentials? Here the obstacle is that there is not strong rejection when $r \to 0$ and this does not allow to have separate points. Moreover: Is C^*_{13} the global minimum? In my opinion it will be possible to answer this by a combination of an exhaustive search and by the symmetrical properties of IF and such proposition could be proved by using a computer to explore in wise fashion the local optimal clusters of 13 particles in IF. Maybe in similar way to the proof of the Four-Color Theorem. Other conjecture open by this work is: Are all the optimal cluster under LJ or for equivalent potentials in IF? The answer of this conjecture does not change the results of my propositions, it is clear that if there are new cases, these can be added without problem but IF will possibly lose the beautiful minimum combination of IC and FC. In the case, of huge clusters it is possible that other lattices could be added to IF with other geometrical motifs.

Finally, this novel formulation brings new perspectives for NP's complexity and will be extended in the future to other potential functions.

Acknowledgement

This work was supported by Elsa Guillermina Barrón and Emma Romero. It is dedicated to them and to Roland Glowinski, Ioannis A. Kakadiaris, Alberto Santamaría, David Romero, Susana Gómez, and Hector Lorenzo Juárez. This work started long ago, but I would not have finished it without the help, support, and friendship of Alberto Santamaría. Also, thanks to following institutions University of Houston, IIMAS-UNAM, UAM-I, and CIMAT.

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