

CALABI-YAU THREEFOLDS WITH SMALL HODGE NUMBERS

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Abstract

We present a master list of Calabi-Yau threefolds, known to us, with small Hodge numbers, which we understand to be those manifolds with height $(h^{1,1} + h^{2,1}) \leq 24$. With the completion of a project to compute the Hodge numbers of all free quotients of complete intersection Calabi-Yau threefolds by Candelas et. al. in [1–3], many new points have been added to the tip of the Hodge plot, updating the reviews by Davies and Candelas in [1, 4]. In view of this and other recent constructions of Calabi-Yau threefolds with small height we have produced an updated list.

Preamble

The tip of the Hodge plot has seen large population growth in recent years. Refs. [1] and [4] provided lists of Calabi-Yau threefolds with small Hodge numbers that were comprehensive at the time. The relatively recent work [3] increased the list considerably (see Figure 1). These CY manifolds are in some sense, among the simplest CY manifolds. It is an interesting question to what extent one can base phenomenologically viable string vacua on these spaces. In Ref. [5], an example of a Calabi-Yau manifold with the smallest Hodge numbers possible for a non-rigid manifold, was obtained.

We list here all the Calabi-Yau threefolds with small Hodge numbers that are known to us. For this purpose, small Hodge numbers are all pairs $(h^{1,1}, h^{2,1})$ such that $h^{1,1} + h^{2,1} \leq 24$, although for most cases we do not list the mirror manifolds. This bound of 24 on the height is arbitrarily chosen, though it coincides with the choice of [1] and also corresponds to a height low enough so as to separate these points from the Kreuzer-Skarke list. A list of Calabi-Yau manifolds with larger height, albeit somewhat dated, can be found in the online resource [6].

There are many methods that were used to construct these Calabi-Yau threefolds. We do not review the methods used to construct this list, since many of these have been discussed in [1, 4]. An exception is made for the potentially rich construction of generalized-CICYs introduced in [7].

The Hodge plot (Figure 1) becomes denser as we go up in height and merges into the Kreuzer-Skarke list. This list is denser especially owing to the fact that many points have high multiplicities. Figure 1 indicates many new Hodge numbers found in Refs. [1–3].

Below we produce the master table discussed above. The table lists Calabi-Yau threefolds in decreasing order of height $h^{1,1} + h^{2,1}$ and $h^{1,1}$.

A few comments about the notation are in order. In our notation, $X^{p,q}$ denotes a manifold with $h^{1,1} = p$ and $h^{2,1} = q$, while dP_n denotes a del Pezzo surface of degree n . In particular, $X^{20,20}$ refers to the manifold associated with the 24-cell discussed in Ref. [5]. $X^{19,19}$ refers to the split bicubic discussed e.g. in §2.2.2 of [4]. The variety X^\sharp denotes a singular member of a generically smooth family of manifolds and \widehat{X} denotes a resolution of a singular variety X^\sharp . The notation $\mathbb{P}^7[2\ 2\ 2\ 2]^\sharp$ and $\mathbb{P}^7[2\ 2\ 2\ 2]^\sharp\sharp$ denote two different singularizations. χ and y denote respectively, the Euler characteristic and height $h^{1,1} + h^{2,1}$ of the manifold in question. Mirrors of manifolds with $\chi < 0$ are known to exist (except possibly for the manifold by Tonoli [8] and the more recent ones by Kapustka [9]) and we do not list them in our table.

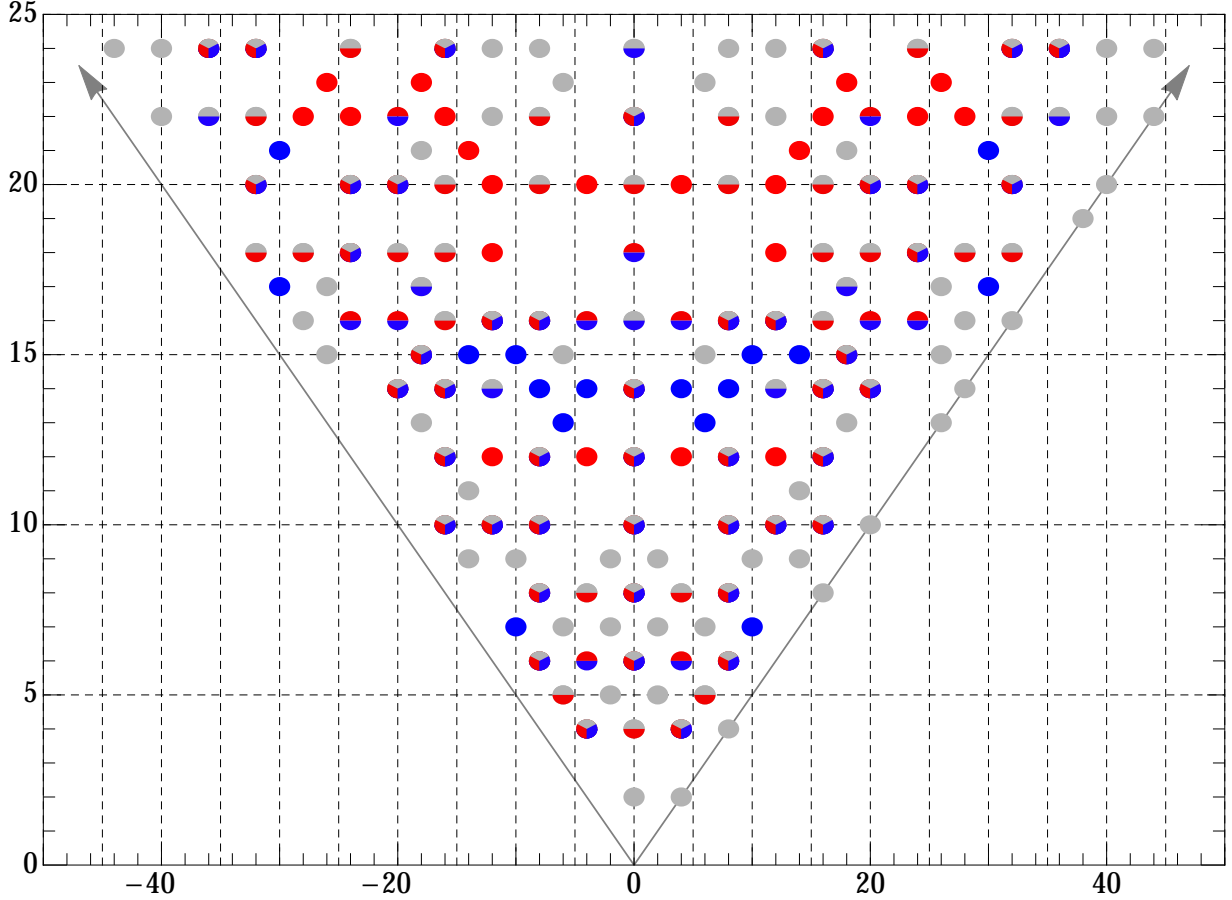


Figure 1: *The tip of the Hodge number plot for all the Calabi-Yau three-folds that we know. The grey points are the manifolds of the Kreuzer-Skarke list, CICYs, generalized CICYs, toric CICYs, resolutions of toric conifolds, Gross-Popescu manifolds, the manifold of V. Braun with Hodge numbers (1,1), manifolds obtained through hyperconifold transitions and other manifolds studied in Refs. [4, 5, 7–30], as well as the mirrors of the foregoing. The blue points correspond to the CICY quotients studied in [1, 2]. The red points correspond to CICY quotients studied in the recent paper [3] together with their mirrors. Monochrome points indicate quotients whose Hodge numbers fall onto sites otherwise unoccupied, while the multicoloured points correspond to multiply occupied sites.*

In a recent work [7], a generalization of Complete Intersection Calabi-Yau manifolds was presented, wherein some new manifolds, called gCICYs, were found. Two types of gCICYs that were presented are of codimension 2 and 3 respectively:

$$X_{(1,1)} = \begin{array}{c} \mathbb{P}^{n_1} \\ \mathbb{P}^{n_2} \\ \vdots \\ \mathbb{P}^{n_m} \end{array} \left[\begin{array}{c|c} a^1 & b^1 \\ a^2 & b^2 \\ \vdots & \vdots \\ a^m & b^m \end{array} \right], \quad X_{(2,1)} = \begin{array}{c} \mathbb{P}^{n_1} \\ \mathbb{P}^{n_2} \\ \vdots \\ \mathbb{P}^{n_m} \end{array} \left[\begin{array}{cc|c} a_1^1 & a_2^1 & b^1 \\ a_1^2 & a_2^2 & b^2 \\ \vdots & \vdots & \vdots \\ a_1^m & a_2^m & b^m \end{array} \right] \quad (0.1)$$

where $a^i, a_1^i, a_2^i \in \mathbb{Z}_{\geq 0}$ and b^i can assume negative integer values. The “ a ”-columns correspond to homogeneous polynomials, i.e. globally defined sections of non-negative degree line bundles. On the other hand, the mixed-degree line bundle associated with the “ b ”-column has no global sections on the ambient multi-projective space. However, in special cases, it can have global sections on the sub-manifold defined by the vanishing of the “ a ”-polynomials, thus defining a hypersurface. The polynomial conditions are applied sequentially from left to right. The condition that these matrices define a Calabi-Yau manifold is the same as that for ordinary CICYs i.e., the sum of the entries in the k^{th} row equals $n_k + 1$.

At the end, we devote a short table (Table 2) to (resolved) quotients of resolutions of singular complete intersections of four quadrics in a \mathbb{P}^7 with homogeneous coordinates $(X_0, X_1, X_2, X_3, Y_0, Y_1, Y_2, Y_3)$. In particular we denote by \mathfrak{X} , the following complete intersection [27]:

$$\begin{aligned} Y_0^2 &= X_0^2 + X_1^2 + X_2^2 + X_3^2 \\ Y_1^2 &= X_0^2 - X_1^2 + X_2^2 - X_3^2 \\ Y_2^2 &= X_0^2 + X_1^2 - X_2^2 - X_3^2 \\ Y_3^2 &= X_0^2 - X_1^2 - X_2^2 + X_3^2 . \end{aligned}$$

\mathfrak{X} has 96 isolated singularities and admits a resolution which is a Calabi-Yau threefold. The Hodge numbers of the quotients of \mathfrak{X} by groups isomorphic to \mathbb{Z}_2^m , for different values of m , are listed in the Table 2 along with other resolutions.

Table 1: Table of Calabi-Yau manifolds with small Hodge numbers.

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(0, 24)$	$(12, 12)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{c c} 1 & 1 \\ \hline 1 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 0 & 2 \\ \hline 0 & 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 4 & -2 \end{array} \right] \end{array}$	[7]
$(0, 24)$	$(12, 12)$	$\widehat{X^{19,19}}/\mathbb{Z}_2$	[1]
$(0, 24)$	$(12, 12)$	$X^{20,20}/\mathbb{Z}_2$	[5]
$(-8, 24)$	$(10, 14)$	$\begin{array}{c} \mathbb{P}^2 \left[\begin{array}{cc c} 1 & 0 & 2 \\ \hline 0 & 1 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 0 & 1 & 1 \\ \hline 0 & 1 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 3 & -2 \\ \hline 1 & 0 & 1 \end{array} \right] \end{array}, \quad \begin{array}{c} \mathbb{P}^2 \left[\begin{array}{cc c} 1 & 0 & 2 \\ \hline 0 & 3 & -1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 0 & 1 & 1 \\ \hline 1 & 1 & 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 0 & 1 \end{array} \right] \end{array},$ $\begin{array}{c} \mathbb{P}^2 \left[\begin{array}{cc c} 1 & 0 & 2 \\ \hline 0 & 0 & 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 0 & 1 & 1 \\ \hline 1 & 1 & 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 3 & -2 \end{array} \right] \end{array}$	[7]
$(-12, 24)$	$(9, 15)$	$\begin{array}{c} \mathbb{P}^3 \left[\begin{array}{cc c} 1 & 0 & 3 \\ \hline 0 & 1 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 1 & 0 \\ \hline 1 & 3 & -2 \end{array} \right] \end{array}$	[7]
$(-16, 24)$	$(8, 16)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{ccc} 2 & 0 & 0 \\ \hline 0 & 0 & 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{ccc} 1 & 1 & 0 \\ \hline 1 & 1 & 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{ccc} 0 & 1 & 1 \\ \hline 0 & 1 & 1 \end{array} \right] \end{array} / \mathbb{Z}_2$	$[3, 30]^1$
<i>Continued on the following page</i>			

¹This manifold corresponds to the \mathbb{Z}_2 quotient of a manifold embedded in $dP_4 \times dP_4$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 24)$	$(8, 16)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 0 & 1 & 2 & 2 \end{bmatrix} \end{array} / \mathbb{Z}_2$	$[3, 30]^1$
$(-16, 24)$	$(8, 16)$	$\begin{array}{l} \mathbb{P}^4 \begin{bmatrix} 2 & 2 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 0 & 0 & 2 & 2 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	$[1, 3, 30]^1$
$(-24, 24)$	$(6, 18)$	$\begin{array}{l} \mathbb{P}^2 \left[\begin{array}{cc c} 0 & 1 & 2 \end{array} \right] \quad \mathbb{P}^2 \left[\begin{array}{cc c} 0 & 1 & 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 0 & 1 & 1 \end{array} \right] \quad \mathbb{P}^1 \left[\begin{array}{cc c} 0 & 3 & -1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 0 & 1 \end{array} \right] \quad \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 1 & 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 0 & 1 \end{array} \right] \quad \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 0 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 3 & -2 \end{array} \right] \quad \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 0 & 1 \end{array} \right] \end{array} ,$ $\begin{array}{l} \mathbb{P}^2 \left[\begin{array}{cc c} 0 & 1 & 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 0 & 0 & 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 1 & 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 3 & -2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{cc c} 1 & 0 & 1 \end{array} \right] \end{array}$	$[7]$
$(-24, 24)$	$(6, 18)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	$[3]$
$(-24, 24)$	$(6, 18)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 1 & 2 \end{bmatrix} \end{array} / \mathbb{Z}_2$	$[3]$
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Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-24, 24)$	$(6, 18)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^5 \begin{bmatrix} 1 & 1 & 1 & 1 & 0 & 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-32, 24)$	$(4, 20)$	$\mathbb{P}^2 \begin{bmatrix} 1 & 2 \\ 0 & 2 \\ 1 & 1 \\ 4 & -2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 2 \\ 0 & 2 \\ 1 & 1 \\ 4 & -2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 2 \\ 0 & 2 \\ 1 & 1 \\ 4 & -2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 2 \\ 0 & 2 \\ 1 & 1 \\ 4 & -2 \end{bmatrix}$	[7]
$(-32, 24)$	$(4, 20)$	$\mathbb{P}^1 \begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[1, 3, 30]
$(-32, 24)$	$(4, 20)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 1 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-32, 24)$	$(4, 20)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-32, 24)$	$(4, 20)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-32, 24)$	$(4, 20)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^4 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^4 \begin{bmatrix} 0 & 1 & 0 & 1 & 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
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Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-36, 24)$	$(3, 21)$	$\begin{matrix} \mathbb{P}^1 \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 3 \end{bmatrix} \end{matrix} / \mathbb{Z}_3$	$[1, 30]^2$
$(-36, 24)$	$(3, 21)$	$\begin{matrix} \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 \\ 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 \\ 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix} \end{matrix} / \mathbb{Z}_2$	[3]
$(-44, 24)$	$(1, 23)$	Degree 17 submanifold of \mathbb{P}^6	[8]
$(-44, 24)$	$(1, 23)$	Degree 19 submanifold of \mathbb{P}^6	[9]
$(-6, 23)$	$(10, 13)$	$\mathbb{P} \begin{pmatrix} 0 & 0 & 1 & 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 1 & 1 & 1 & 1 \\ 3 & 0 & 0 & 1 & 0 & 2 & 2 & 0 & 1 \end{pmatrix} \begin{bmatrix} 3 & 0 \\ 1 & 3 \\ 3 & 3 \\ 3 & 6 \end{bmatrix}$	[15]
$(-18, 23)$	$(7, 16)$	$\begin{matrix} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & 1 & 1 \end{bmatrix} \end{matrix} / \mathbb{Z}_2$	[3]
$(-26, 23)$	$(5, 18)$	$\begin{matrix} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & 1 & 0 & 1 & 0 & 1 \end{bmatrix} \end{matrix} / \mathbb{Z}_2$	[3]
$(36, 22)$	$(20, 2)$	Smoothing of variety obtained by blowing down 18 rational curves on the rigid “Z” manifold	[28]
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²This manifold corresponds to the \mathbb{Z}_3 quotient of a manifold embedded in $\mathbb{P}^2 \times d\mathbb{P}_6$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(0, 22)$	$(11, 11)$	$\begin{array}{c} \mathbb{P}^2 \left[\begin{array}{c c} 0 & 3 \\ \hline 1 & 1 \\ 1 & 1 \\ 4 & -2 \end{array} \right] \end{array}$	[7]
$(0, 22)$	$(11, 11)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 2 \\ 0 \\ 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 2 \\ 0 \\ 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 2 \\ 0 \\ 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 2 \\ 0 \\ 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 2 \\ 0 \\ 2 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(0, 22)$	$(11, 11)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 0 \\ 1 \\ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 0 \\ 1 \\ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 0 \\ 0 \\ 1 \\ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \\ 0 \\ 1 \\ 2 \\ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \\ 0 \\ 1 \\ 2 \\ 0 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(0, 22)$	$(11, 11)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 2 \\ 2 \\ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 2 \\ 2 \\ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 2 \\ 2 \\ 0 \end{array} \right] \\ \mathbb{P}^4 \left[\begin{array}{c} 1 \\ 2 \\ 2 \\ 0 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(0, 22)$	$(11, 11)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 3 \\ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \\ 3 \\ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \\ 3 \\ 0 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[21]
$(0, 22)$	$(11, 11)$	$\begin{array}{c} \mathbb{P}^1 \left[\begin{array}{c} 1 \\ 1 \\ 0 \\ 0 \\ 0 \end{array} \right] \\ \mathbb{P}^4 \left[\begin{array}{c} 1 \\ 1 \\ 0 \\ 2 \\ 2 \end{array} \right] \\ \mathbb{P}^4 \left[\begin{array}{c} 1 \\ 1 \\ 0 \\ 2 \\ 2 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(-8, 22)$	$(9, 13)$	$\begin{array}{c} \mathbb{P}^3 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 1 \\ 0 & 1 \\ 1 & 3 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 1 \\ 0 & 1 \\ 1 & 3 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 1 \\ 0 & 1 \\ 1 & 3 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 1 \\ 0 & 1 \\ 1 & 3 \end{array} \right] \end{array}, \begin{array}{c} \mathbb{P}^3 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 3 \\ 0 & 1 \\ 1 & 1 \end{array} \right] \\ \mathbb{P}^3 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 3 \\ 0 & 1 \\ 1 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 3 \\ 0 & 1 \\ 1 & 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c c} 2 & 0 \\ \hline 0 & 3 \\ 0 & 1 \\ 1 & 1 \end{array} \right] \end{array}$	[7]

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Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-8, 22)$	$(9, 13)$	$\begin{array}{l} \mathbb{P}^1 [1\ 1\ 0\ 0\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 0\ 1\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 1\ 0\ 1\ 0] \\ \mathbb{P}^1 [0\ 0\ 1\ 0\ 0\ 1] \\ \mathbb{P}^1 [2\ 0\ 0\ 0\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 2\ 0\ 0\ 0] \\ \mathbb{P}^3 [0\ 1\ 0\ 1\ 1\ 1] \end{array} / \mathbb{Z}_2$	[3]
$(-12, 22)$	$(8, 14)$	$\mathbb{P} \begin{pmatrix} 4 & 2 & 2 & 2 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 2 & 0 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix} \begin{bmatrix} 8 & 4 \\ 0 & 4 \\ 2 & 0 \end{bmatrix} / \mathbb{Z}_2 : 1, 1, 0, 0, 1, 0, 1, 0$	[15, 16]
$(-16, 22)$	$(7, 15)$	$\begin{array}{l} \mathbb{P}^1 [1\ 1\ 0] \\ \mathbb{P}^1 [0\ 0\ 2] \\ \mathbb{P}^1 [1\ 1\ 0] \\ \mathbb{P}^1 [1\ 1\ 0] \\ \mathbb{P}^1 [1\ 0\ 1] \\ \mathbb{P}^1 [0\ 1\ 1] \end{array} / \mathbb{Z}_2$	[3]
$(-16, 22)$	$(7, 15)$	$\begin{array}{l} \mathbb{P}^1 [1\ 1\ 0\ 0\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 1\ 1\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 0\ 0\ 1\ 0] \\ \mathbb{P}^1 [1\ 0\ 0\ 0\ 1\ 0] \\ \mathbb{P}^1 [0\ 0\ 1\ 0\ 0\ 1] \\ \mathbb{P}^1 [0\ 0\ 1\ 0\ 0\ 1] \\ \mathbb{P}^3 [0\ 1\ 0\ 1\ 1\ 1] \end{array} / \mathbb{Z}_2$	[3]
$(-16, 22)$	$(7, 15)$	$\begin{array}{l} \mathbb{P}^1 [1\ 1\ 0\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 1\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 0\ 1\ 1] \\ \mathbb{P}^1 [0\ 0\ 0\ 1\ 1] \\ \mathbb{P}^1 [2\ 0\ 0\ 0\ 0] \\ \mathbb{P}^3 [0\ 1\ 1\ 1\ 1] \end{array} / \mathbb{Z}_2$	[3]
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Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 22)$	$(7, 15)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-16, 22)$	$(7, 15)$	$\begin{array}{l} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-20, 22)$	$(6, 16)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-20, 22)$	$(6, 16)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 0 & 1 & 0 & 1 & 0 & 1 & 0 & 1 & 0 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[1, 3]
$(-20, 22)$	$(6, 16)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 1 & 1 & 1 & 0 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-24, 22)$	$(5, 17)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 0 & 1 & 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-24, 22)$	$(5, 17)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-24, 22)$	$(5, 17)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-24, 22)$	$(5, 17)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-24, 22)$	$(5, 17)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 0 & 1 & 0 & 1 & 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-28, 22)$	$(4, 18)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 1 & 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-28, 22)$	$(4, 18)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 0 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-32, 22)$	$(3, 19)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-32, 22)$	$(3, 19)$	$\widehat{\mathbb{P}^4[5]/D_5}$	$[25]^3$
$(-36, 22)$	$(2, 20)$	$\begin{array}{l} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 1 & 1 & 1 & 3 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
$(-40, 22)$	$(1, 21)$	$\mathbb{P}^4[5]/\mathbb{Z}_5$	[13, 16]
$(18, 21)$	$(15, 6)$	Smoothing of variety obtained by blowing down 27 rational curves on the rigid “Z” manifold	[28]
$(-14, 21)$	$(7, 14)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 0 & 1 & 0 & 1 & 0 & 0 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 0 & 1 & 0 & 1 & 0 & 1 & 0 & 0 & 0 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-30, 21)$	$(3, 18)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 0 & 1 & 1 & 1 & 3 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
<i>Continued on the following page</i>			

3D_5 is the dihedral group (of order 10) of all symmetries of a regular pentagon.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-30, 21)$	$(3, 18)$	$\mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_3$	[1]
$(0, 20)$	$(10, 10)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-4, 20)$	$(9, 11)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 1 & 1 \\ 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 1 & 0 & 0 & 0 & 0 & 1 & 0 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-8, 20)$	$(8, 12)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 & 0 & 1 & 0 \end{bmatrix} / \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-8, 20)$	$(8, 12)$	$\begin{array}{l} \mathbb{P}^1 \left[\begin{array}{c} 1 \ 1 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 1 \ 1 \ 0 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 0 \ 1 \ 1 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 2 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^3 \left[\begin{array}{c} 1 \ 0 \ 1 \ 0 \ 0 \ 1 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^3 \left[\begin{array}{c} 0 \ 1 \ 0 \ 1 \ 0 \ 0 \ 1 \ 1 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(-8, 20)$	$(8, 12)$	$\begin{array}{l} \mathbb{P}^1 \left[\begin{array}{c} 1 \ 1 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 2 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 1 \ 0 \ 0 \ 0 \ 1 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 1 \ 0 \ 0 \ 1 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 1 \ 1 \ 1 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \ 0 \ 1 \ 1 \ 0 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(-8, 20)$	$(8, 12)$	$\begin{array}{l} \mathbb{P}^1 \left[\begin{array}{c} 1 \ 1 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 0 \ 1 \ 1 \ 1 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 0 \ 1 \ 1 \ 0 \ 1 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \ 0 \ 0 \ 0 \ 1 \ 0 \ 1 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 1 \ 0 \ 0 \ 0 \ 1 \ 0 \ 1 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 1 \ 1 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 1 \ 1 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
$(-12, 20)$	$(7, 13)$	$\begin{array}{l} \mathbb{P}^1 \left[\begin{array}{c} 1 \ 1 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 0 \ 1 \ 1 \ 0 \end{array} \right] \\ \mathbb{P}^1 \left[\begin{array}{c} 0 \ 0 \ 0 \ 0 \ 0 \ 1 \ 1 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 0 \ 1 \ 1 \ 0 \ 0 \ 0 \ 1 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 0 \ 1 \ 0 \ 1 \ 0 \ 0 \ 1 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 1 \ 0 \ 0 \ 1 \ 0 \ 1 \ 0 \ 0 \end{array} \right] \\ \mathbb{P}^2 \left[\begin{array}{c} 0 \ 1 \ 0 \ 0 \ 1 \ 0 \ 1 \ 0 \end{array} \right] \end{array} \Big/ \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 20)$	$(6, 14)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 0 & 1 & 1 & 0 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-20, 20)$	$(5, 15)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-20, 20)$	$(5, 15)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[1, 3]
$(-20, 20)$	$(5, 15)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 1 & 1 & 0 \end{bmatrix} \end{array} / \mathbb{Z}_2$	[3]
$(-20, 20)$	$(5, 15)$	$\widehat{\mathbb{P}^4[5] / \mathbb{A}_5}$	$[25]^4$
$(-24, 20)$	$(4, 16)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	$[1, 3, 30]^5$
<i>Continued on the following page</i>			

⁴ \mathbb{A}_5 is the group of even permutations on five elements.

⁵This manifold corresponds to the \mathbb{Z}_3 quotient of a manifold embedded in $d\mathbb{P}_6 \times d\mathbb{P}_6$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-24, 20)$	$(4, 16)$	$\begin{array}{c} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	$[3, 30]^5$
$(-24, 20)$	$(4, 16)$	$\mathbb{P} \begin{pmatrix} 1 & 1 & 1 & 1 & 1 & 0 \\ 1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix} \begin{bmatrix} 3 & 3 \\ 3 & 0 \end{bmatrix} / \mathbb{Z}_3 : 1, 2, 1, 2, 0, 0, 0, 0$	$[15, 16]$
$(-32, 20)$	$(2, 18)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix} \end{array} / \mathbb{Z}_4$	$[1, 3, 30]$
$(24, 18)$	$(15, 3)$	Crepant resoln. of $\widehat{X_1/G}$, $G = (\mathbb{Z}_5 \times \mathbb{Z}_5 \times \mathbb{Z}_5) \rtimes \mathbb{A}_5$	$[31]^6$
$(0, 18)$	$(9, 9)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \\ 0 & 0 & 2 \\ 2 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 1 & 1 \\ 1 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \\ 0 & 0 & 2 \\ 2 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 1 & 1 \\ 1 & 0 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	$[3]$
$(0, 18)$	$(9, 9)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2$	$[3]$
<i>Continued on the following page</i>			

⁶ X_1 is the smooth quintic threefold given by $x_1^2 + x_2^2 + x_3^2 + x_4^2 + x_5^2 = 0$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(0, 18)$	$(9, 9)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 \\ 0 & 0 & 0 & 1 & 1 \\ 2 & 0 & 0 & 0 & 0 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(0, 18)$	$(9, 9)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 & 1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 0 & 1 & 0 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 1 & 0 \end{bmatrix} / \mathbb{Z}_2$	[1, 3]
$(0, 18)$	$(9, 9)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 & 1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 0 \end{bmatrix} / \mathbb{Z}_2$	[3]
$(-12, 18)$	$(6, 12)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 \\ 0 & 1 & 1 \\ 1 & 1 & 0 \\ 1 & 1 & 0 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 18)$	$(5, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-16, 18)$	$(5, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-16, 18)$	$(5, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 & 0 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-16, 18)$	$(5, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 2 & 0 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-16, 18)$	$(5, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^6 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-16, 18)$	$(5, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^7 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 18)$	$(5, 13)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 \\ 0 & 0 & 2 \\ 2 & 2 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	$[3, 30]^7$
$(-20, 18)$	$(4, 14)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \\ 2 & 0 & 0 & 0 \\ 0 & 2 & 0 & 0 \\ 1 & 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-20, 18)$	$(4, 14)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 2 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 1 & 1 & 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-20, 18)$	$(4, 14)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 2 & 0 \\ 1 & 1 & 1 & 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-20, 18)$	$(4, 14)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 \\ 1 & 1 & 1 & 1 & 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-24, 18)$	$(3, 15)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 2 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 1 & 1 & 2 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-24, 18)$	$(3, 15)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 \\ 1 & 1 & 1 & 2 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-24, 18)$	$(3, 15)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 1 & 2 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

⁷This manifold corresponds to the $\mathbb{Z}_2 \times \mathbb{Z}_2$ quotient of a manifold embedded in $(\mathbb{P}^1 \times \mathbb{P}^1) \times dP_4$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-24, 18)$	$(3, 15)$	$\begin{array}{c} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
$(-24, 18)$	$(3, 15)$	$\mathbb{P}^5 \widehat{[3, 3]} / G, \quad G = \mathbb{Z}_3 \times \mathbb{Z}_2$	[1]
$(-28, 18)$	$(2, 16)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^6 \begin{bmatrix} 2 & 2 & 2 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-28, 18)$	$(2, 16)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^7 \begin{bmatrix} 2 & 2 & 2 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-32, 18)$	$(1, 17)$	$\mathbb{P}^7 \begin{bmatrix} 2 & 2 & 2 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3, 19]
$(-32, 18)$	$(1, 17)$	$\mathbb{P}^7 \begin{bmatrix} 2 & 2 & 2 & 2 \end{bmatrix} / \mathbb{Z}_4$	[3, 19]
$(-18, 17)$	$(4, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
$(-18, 17)$	$(4, 13)$	$\begin{array}{c} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 0 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
$(-18, 17)$	$(4, 13)$	$\begin{array}{c} \mathbb{P}^2 \begin{bmatrix} 3 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 3 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[30, 32] ⁸
$(-30, 17)$	$(1, 16)$	$\begin{array}{c} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
<i>Continued on the following page</i>			

⁸This manifold corresponds to the \mathbb{Z}_3 quotient of a manifold embedded in $\mathbb{P}^2 \times d\mathbb{P}_3$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
(8, 16)	(10, 6)	$\widehat{X^{8,44}}/\mathbb{Z}_3 \times \mathbb{Z}_3$	[1] ⁹
(4, 16)	(9, 7)	$\widehat{X^{5,59}}/\mathbb{Z}_3 \times \mathbb{Z}_3$	[1] ¹⁰
(0, 16)	(8, 8)	$\widehat{X^{19,19}}/\mathbb{Z}_2 \times \mathbb{Z}_2$	[1]
(0, 16)	(8, 8)	$\mathbb{P}(1 \ 1 \ 1 \ 1 \ 4)[8]^\sharp$	[14]
(0, 16)	(8, 8)	(Toric Hypersurface $Y^{20,20}$)/ \mathbb{Z}_3	[26]
(0, 16)	(8, 8)	$X^{20,20}/\mathbb{Z}_3$	[5]
(-4, 16)	(7, 9)	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
(-8, 16)	(6, 10)	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 1 & 0 \\ 0 & 0 & 2 \\ 1 & 1 & 0 \\ 1 & 1 & 0 \\ 1 & 0 & 1 \\ 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

⁹ $X^{8,44}$ is the manifold $\begin{matrix} \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 \end{bmatrix}$.

¹⁰ $X^{5,59}$ is the manifold $\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 0 & 1 \\ 1 & 1 \\ 1 & 1 \\ 0 & 3 \end{bmatrix}$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-8, 16)$	$(6, 10)$	$\begin{matrix} \mathbb{P}^1 [2\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 2] \\ \mathbb{P}^1 [1\ 1\ 0] \\ \mathbb{P}^1 [1\ 1\ 0] \\ \mathbb{P}^1 [0\ 1\ 1] \\ \mathbb{P}^1 [0\ 1\ 1] \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-8, 16)$	$(6, 10)$	$\begin{matrix} \mathbb{P}^1 [1\ 1\ 0\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 1\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 0\ 1\ 1] \\ \mathbb{P}^1 [0\ 0\ 0\ 1\ 1] \\ \mathbb{P}^1 [2\ 0\ 0\ 0\ 0] \\ \mathbb{P}^3 [0\ 1\ 1\ 1\ 1] \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-8, 16)$	$(6, 10)$	$\begin{matrix} \mathbb{P}^1 [1\ 1\ 0\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 1\ 0\ 0] \\ \mathbb{P}^1 [0\ 0\ 0\ 1\ 1] \\ \mathbb{P}^1 [0\ 0\ 0\ 2\ 0] \\ \mathbb{P}^1 [2\ 0\ 0\ 0\ 0] \\ \mathbb{P}^3 [0\ 1\ 1\ 1\ 1] \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-8, 16)$	$(6, 10)$	$\begin{matrix} \mathbb{P}^1 [2\ 0\ 0\ 0] \\ \mathbb{P}^1 [1\ 1\ 0\ 0] \\ \mathbb{P}^1 [1\ 1\ 0\ 0] \\ \mathbb{P}^4 [0\ 1\ 2\ 2] \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-8, 16)$	$(6, 10)$	$\begin{matrix} \mathbb{P}^4 [2\ 2\ 0\ 0\ 1] \\ \mathbb{P}^4 [0\ 0\ 2\ 2\ 1] \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	$[1, 3, 30]^{11}$
$(-12, 16)$	$(5, 11)$	$\begin{matrix} \mathbb{P}^1 [0\ 1\ 1\ 0\ 0\ 0\ 0\ 0] \\ \mathbb{P}^1 [0\ 1\ 0\ 1\ 0\ 0\ 0\ 0] \\ \mathbb{P}^1 [0\ 1\ 0\ 0\ 1\ 0\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 0\ 0\ 0\ 1\ 0\ 0] \\ \mathbb{P}^1 [1\ 0\ 0\ 0\ 0\ 0\ 1\ 0] \\ \mathbb{P}^1 [1\ 0\ 0\ 0\ 0\ 0\ 0\ 1] \\ \mathbb{P}^5 [0\ 0\ 1\ 1\ 1\ 1\ 1\ 1] \end{matrix} / \mathbb{Z}_3$	[1]
<i>Continued on the following page</i>			

¹¹This manifold corresponds to the $\mathbb{Z}_2 \times \mathbb{Z}_2$ quotient of a manifold embedded in $dP_4 \times dP_4$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-12, 16)$	$(5, 11)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-12, 16)$	$(5, 11)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-12, 16)$	$(5, 11)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 0 & 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-12, 16)$	$(5, 11)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-12, 16)$	$(5, 11)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 0 & 1 & 1 & 1 & 1 \end{bmatrix}$ $\mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_3$	$[2, 30]^{12}$
$(-16, 16)$	$(4, 12)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 \end{bmatrix}$ $\mathbb{P}^3 \begin{bmatrix} 1 & 1 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
<i>Continued on the following page</i>			

¹²This manifold corresponds to the \mathbb{Z}_3 quotient of the split, by a \mathbb{P}^2 , of a manifold embedded in $d\mathbb{P}_6 \times d\mathbb{P}_3$. Note that splitting by a \mathbb{P}^2 doesn't change the Euler characteristic of the precursor manifold.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 16)$	$(4, 12)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 & \begin{bmatrix} 1 & 1 & 2 \end{bmatrix} \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-20, 16)$	$(3, 13)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 2 & 0 \end{bmatrix} \\ \mathbb{P}^3 & \begin{bmatrix} 2 & 2 \end{bmatrix} \end{matrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(-20, 16)$	$(3, 13)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 0 & 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 1 & 0 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 0 & 1 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 0 & 0 & 1 & 0 & 1 & 1 \end{bmatrix} \end{matrix} / \mathbb{Z}_3$	[2]
$(-24, 16)$	$(2, 14)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 0 & 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^5 & \begin{bmatrix} 1 & 1 & 2 & 2 \end{bmatrix} \end{matrix} / \mathbb{Z}_4$	[3]
$(-24, 16)$	$(2, 14)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^7 & \begin{bmatrix} 1 & 1 & 1 & 1 & 2 & 2 \end{bmatrix} \end{matrix} / \mathbb{Z}_4$	[3]
$(-24, 16)$	$(2, 14)$	$\begin{matrix} \mathbb{P}^2 & \begin{bmatrix} 1 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 0 & 1 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 1 & 1 & 1 & 0 & 0 \end{bmatrix} \end{matrix} / \mathbb{Z}_3$	[1]
$(10, 15)$	$(10, 5)$	$\widehat{X^{6,33}} / \mathbb{Z}_3 \times \mathbb{Z}_3$	[1] ¹³
<i>Continued on the following page</i>			

¹³ $X^{6,33}$ is the manifold
$$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 1 & 0 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 & \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 & \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^5 & \begin{bmatrix} 0 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{matrix}.$$

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
(-6, 15)	(6, 9)	$\mathbb{P}^3 \begin{bmatrix} 1 & 3 & 0 \\ 1 & 0 & 3 \end{bmatrix} / \mathbb{Z}_3$	$[30, 33, 34]^{14}$
(-10, 15)	(5, 10)	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 & 0 & 1 & 0 & 1 \end{bmatrix} / \mathbb{Z}_3$	[2]
(-10, 15)	(5, 10)	$\widehat{X^{3,48}} / \mathbb{Z}_3 \times \mathbb{Z}_3$	$[1]^{15}$
(-14, 15)	(4, 11)	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 & 1 & 1 & 0 & 0 \end{bmatrix} / \mathbb{Z}_3$	[2]
(-18, 15)	(3, 12)	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix} / \mathbb{Z}_4$	$[3, 30]^{16}$
<i>Continued on the following page</i>			

¹⁴This manifold corresponds to the \mathbb{Z}_3 quotient of a manifold embedded in $dP_3 \times dP_3$.

¹⁵ $X^{3,48}$ is the manifold $\mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \end{bmatrix}$.

¹⁶This manifold corresponds to the \mathbb{Z}_4 quotient of a manifold embedded in $dP_6 \times dP_6$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-18, 15)$	$(3, 12)$	$\mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	$[3, 30]^{16}$
$(-18, 15)$	$(3, 12)$	$\mathbb{P}^2 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 1 & 0 \end{bmatrix} / \mathbb{Z}_3$	$[1]$
$(16, 14)$	$(11, 3)$	Crepant resoln. of $\widehat{X_1/G}$, $G = ((\mathbb{Z}_5 \times \mathbb{Z}_5) \rtimes \mathbb{Z}_5) \rtimes \mathbb{Z}_2$	$[31]^6$
$(0, 14)$	$(7, 7)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 \\ 0 & 2 \\ 2 & 0 \\ 0 & 2 \\ 2 & 0 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	$[3]$
$(0, 14)$	$(7, 7)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 2 \\ 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	$[3]$
$(0, 14)$	$(7, 7)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 & 0 & 1 \end{bmatrix} / \mathbb{Z}_3$	$[1]$
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(0, 14)$	$(7, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 2 & 0 & 0 & 0 \\ 0 & 1 & 2 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(0, 14)$	$(7, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 1 \\ 3 & 0 \\ 0 & 3 \end{bmatrix} / G, \quad G \in \{\mathbb{Z}_3, \mathbb{Z}_2 \times \mathbb{Z}_2\}$	[21]
$(0, 14)$	$(7, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^4 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 2 & 2 & 0 & 0 \\ 0 & 1 & 0 & 0 & 2 & 2 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(0, 14)$	$(7, 7)$	$\widehat{X^{15,15}} / \mathbb{Z}_3 \times \mathbb{Z}_3$	[1] ¹⁷
$(-4, 14)$	$(6, 8)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 \end{bmatrix} / \mathbb{Z}_3$	[2]
$(-4, 14)$	$(6, 8)$	$\widehat{X^{6,24}} / \mathbb{Z}_3 \times \mathbb{Z}_3$	[1] ¹⁸
<i>Continued on the following page</i>			

¹⁷ $X^{15,15}$ is a complete intersection CY threefold embedded in $(\mathbb{P}^1)^9$. An extended representation of this in which all 15 Kähler classes are represented by ambient spaces was written in [1].

¹⁸ $X^{6,24}$ is the manifold

$$\begin{matrix} \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 \end{bmatrix}.$$

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-8, 14)$	$(5, 9)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
$(-8, 14)$	$(5, 9)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[2]
$(-12, 14)$	$(4, 10)$	$\begin{array}{l} \mathbb{P}^2 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 0 & 0 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_3$	[1]
$(-12, 14)$	$(4, 10)$	$\widehat{X^{3,39}} / \mathbb{Z}_3 \times \mathbb{Z}_2$	[1] ¹⁹
$(-12, 14)$	$(4, 10)$	(Toric hypersurface $X^{8,26}$) / \mathbb{Z}_3	[26]
$(-16, 14)$	$(3, 11)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_4$	[1, 3]
<i>Continued on the following page</i>			

¹⁹ $X^{3,39}$ is the manifold $\begin{array}{l} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array}$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 14)$	$(3, 11)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^5 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 2 & 0 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-16, 14)$	$(3, 11)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^7 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[1, 3]
$(-16, 14)$	$(3, 11)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 0 & 0 & 2 \\ 0 & 0 & 2 \\ 2 & 2 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-20, 14)$	$(2, 12)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 0 & 2 \\ 2 & 0 \\ 2 & 2 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-20, 14)$	$(2, 12)$	$\begin{matrix} \mathbb{P}^4 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_5$	[1]
$(-6, 13)$	$(5, 8)$	$\widehat{X^{9,27}} / \mathbb{Z}_3 \times \mathbb{Z}_2$	[1] ²⁰
$(-18, 13)$	$(2, 11)$	$\begin{matrix} \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 3 \\ 3 \end{bmatrix} / \mathbb{Z}_3 \times \mathbb{Z}_3$	[18, 30]
$(16, 12)$	$(10, 2)$	$(\widehat{X^{5,45}} / \mathbb{Z}_{10} \times \mathbb{Z}_2)^\sharp$	[35] ²¹
<i>Continued on the following page</i>			

²⁰ $X^{9,27}$ is a complete intersection CY threefold embedded in $(\mathbb{P}^1)^6 \times \mathbb{P}^5$.

²¹ $X^{5,45}$ is the manifold $\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \end{bmatrix}$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(0, 12)$	$(6, 6)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 1 \\ 0 & 2 \\ 2 & 0 \\ 0 & 2 \\ 2 & 0 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(0, 12)$	$(6, 6)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 1 & 0 \\ 0 & 0 & 2 \\ 2 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 1 & 1 \\ 1 & 0 & 1 \end{bmatrix} / \mathbb{Z}_2 \times \mathbb{Z}_2$	[3]
$(0, 12)$	$(6, 6)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 2 \\ 0 & 0 & 2 & 0 \\ 1 & 0 & 0 & 2 \\ 0 & 1 & 2 & 0 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(0, 12)$	$(6, 6)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^4 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 2 & 2 & 0 & 0 \\ 0 & 1 & 0 & 0 & 2 & 2 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(0, 12)$	$(6, 6)$	$\widehat{X^{19,19}} / \mathbb{Z}_3 \times \mathbb{Z}_2$	[1]
$(0, 12)$	$(6, 6)$	$\widehat{\mathbb{P}^5[3, 3]}^\# / G, \quad G \subset \mathbb{Z}_6 \times \mathbb{Z}_6$	[14] ²²
$(0, 12)$	$(6, 6)$	$X^{20,20} / \mathbb{Z}_4$	[5]
$(-4, 12)$	$(5, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 2 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 & 0 & 0 \\ 0 & 1 & 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
<i>Continued on the following page</i>			

²²This manifold is the resolution of a conifold of $\mathbb{P}^5[3, 3]$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-8, 12)$	$(4, 8)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 2 & 0 & 0 \\ 0 & 0 & 2 \\ 1 & 1 & 0 \\ 1 & 1 & 0 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-8, 12)$	$(4, 8)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-8, 12)$	$(4, 8)$	$\begin{matrix} \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 & 1 \\ 0 & 0 & 1 & 1 & 0 & 0 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-8, 12)$	$(4, 8)$	$\begin{matrix} \mathbb{P}^4 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 2 & 2 & 0 & 0 & 1 \\ 0 & 0 & 2 & 2 & 1 \end{bmatrix} / \mathbb{Z}_4$	$[1, 3, 30]^{23}$
$(-12, 12)$	$(3, 9)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 0 & 1 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 1 & 0 & 0 & 1 \\ 1 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
$(-12, 12)$	$(3, 9)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 \\ 2 & 0 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4$	[3]
<i>Continued on the following page</i>			

²³This manifold corresponds to the \mathbb{Z}_4 quotient of a manifold embedded in $d\mathbb{P}_4 \times d\mathbb{P}_4$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 12)$	$(2, 10)$	$\begin{matrix} \mathbb{P}^1 [2] \\ \mathbb{P}^1 [2] \\ \mathbb{P}^1 [2] \\ \mathbb{P}^1 [2] \end{matrix} / \mathbb{Z}_4 \times \mathbb{Z}_2$	[1, 3, 30]
$(0, 10)$	$(5, 5)$	$\begin{matrix} \mathbb{P}^1 [1 \ 1] \\ \mathbb{P}^1 [0 \ 2] \\ \mathbb{P}^1 [2 \ 0] \\ \mathbb{P}^1 [0 \ 2] \\ \mathbb{P}^1 [2 \ 0] \end{matrix} / \mathbb{Z}_4$	[3]
$(0, 10)$	$(5, 5)$	$\begin{matrix} \mathbb{P}^1 [1 \ 1 \ 0 \ 0] \\ \mathbb{P}^1 [2 \ 0 \ 0 \ 0] \\ \mathbb{P}^1 [2 \ 0 \ 0 \ 0] \\ \mathbb{P}^4 [0 \ 1 \ 2 \ 2] \end{matrix} / \mathbb{Z}_4$	[3]
$(0, 10)$	$(5, 5)$	$\begin{matrix} \mathbb{P}^1 [1 \ 1] \\ \mathbb{P}^2 [3 \ 0] \\ \mathbb{P}^2 [0 \ 3] \end{matrix} / \mathbb{Z}_4$	[1, 21]
$(0, 10)$	$(5, 5)$	$\begin{matrix} \mathbb{P}^1 [1 \ 1 \ 0 \ 0 \ 0 \ 0] \\ \mathbb{P}^4 [1 \ 0 \ 2 \ 2 \ 0 \ 0] \\ \mathbb{P}^4 [0 \ 1 \ 0 \ 0 \ 2 \ 2] \end{matrix} / \mathbb{Z}_4$	[3]
$(0, 10)$	$(5, 5)$	$\widehat{X^{15,15}}_{/G}, \quad G = \mathbb{Z}_3 \times \mathbb{Z}_3 \times \mathbb{Z}_2$	[1]
$(-8, 10)$	$(3, 7)$	$\begin{matrix} \mathbb{P}^1 [1 \ 0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0] \\ \mathbb{P}^1 [0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 0] \\ \mathbb{P}^1 [0 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0] \\ \mathbb{P}^1 [0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1 \ 0] \\ \mathbb{P}^1 [0 \ 0 \ 0 \ 0 \ 1 \ 0 \ 0 \ 0 \ 0 \ 1] \\ \mathbb{P}^4 [1 \ 1 \ 1 \ 1 \ 1 \ 0 \ 0 \ 0 \ 0 \ 0] \\ \mathbb{P}^4 [0 \ 0 \ 0 \ 0 \ 0 \ 1 \ 1 \ 1 \ 1 \ 1] \end{matrix} / \mathbb{Z}_5$	[1]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-8, 10)$	$(3, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^3 \end{matrix} \begin{bmatrix} 0 & 0 & 0 & 2 \\ 0 & 2 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 2 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4 \times \mathbb{Z}_2$	[3]
$(-8, 10)$	$(3, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^5 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 2 & 0 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4 \times \mathbb{Z}_2$	[3]
$(-8, 10)$	$(3, 7)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^7 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_4 \times \mathbb{Z}_2$	[3]
$(-8, 10)$	$(3, 7)$	$\begin{matrix} \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^5 \end{matrix} \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_3 \times \mathbb{Z}_3$	[1]
$(-8, 10)$	$(3, 7)$	$\widehat{\mathbb{P}^5[3, 3]}_G$, $G = \mathbb{Z}_3 \times \mathbb{Z}_3 \times \mathbb{Z}_2$	[1]
$(-12, 10)$	$(2, 8)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix} / \mathbb{Z}_6$	$[1, 3, 30]^{24}$
<i>Continued on the following page</i>			

²⁴This manifold corresponds to the \mathbb{Z}_6 quotient of a manifold embedded in $dP_6 \times dP_6$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-12, 10)$	$(2, 8)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 1 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 0 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 0 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_5$	[1]
$(-12, 10)$	$(2, 8)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 0 & 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 1 & 1 & 2 & 2 \end{bmatrix} \end{array} / \mathbb{Z}_4 \times \mathbb{Z}_2$	[3]
$(-12, 10)$	$(2, 8)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^7 \begin{bmatrix} 1 & 1 & 1 & 1 & 2 & 2 \end{bmatrix} \end{array} / \mathbb{Z}_4 \times \mathbb{Z}_2$	[3]
$(-12, 10)$	$(2, 8)$	$\begin{array}{l} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^2 \begin{bmatrix} 0 & 0 & 1 & 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_6$	$[3, 30]^{24}$
$(-12, 10)$	$(2, 8)$	$\begin{array}{l} \mathbb{P}^2 \begin{bmatrix} 1 & 1 & 1 & 0 \end{bmatrix} \\ \mathbb{P}^5 \begin{bmatrix} 1 & 1 & 1 & 3 \end{bmatrix} \end{array} / \mathbb{Z}_3 \times \mathbb{Z}_3$	[1]
$(-16, 10)$	$(1, 9)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \end{array} / \mathbb{Q}_8$	[1, 3]
$(-16, 10)$	$(1, 9)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 \end{bmatrix} \end{array} / \mathbb{Z}_8$	[3, 30]

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Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-16, 10)$	$(1, 9)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \end{bmatrix} \\ & / \mathbb{Z}_5 \end{matrix}$	[1, 3]
$(-16, 10)$	$(1, 9)$	$\mathbb{P}^5[3, 3]/\mathbb{Z}_3 \times \mathbb{Z}_3$	[1]
$(-16, 10)$	$(1, 9)$	$\mathbb{P}^7[2, 2, 2, 2]/G, \quad G \in \{\mathbb{Q}_8, \mathbb{Z}_8, \mathbb{Z}_4 \times \mathbb{Z}_2, \mathbb{Z}_2 \times \mathbb{Z}_2 \times \mathbb{Z}_2\}$	[3, 19, 36–38]
$(2, 9)$	$(5, 4)$	(Toric hypersurface $X^{21,16})/\mathbb{Z}_5$	[26]
$(-10, 9)$	$(2, 7)$	(CY threefold $X^{10,35} \subset \mathrm{dP}_5 \times \mathrm{dP}_5)/\mathbb{Z}_5$	[30]
$(-14, 9)$	$(1, 8)$	{Resoln. of a Pfaffian CY manifold}/ \mathbb{Z}_7	[12]
$(0, 8)$	$(4, 4)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 1 \\ 0 & 2 \\ 2 & 0 \\ 0 & 2 \\ 2 & 0 \end{bmatrix} \\ & / \mathbb{Z}_4 \times \mathbb{Z}_2 \end{matrix}$	[3]
$(0, 8)$	$(4, 4)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 2 & 2 & 0 & 0 \\ 0 & 1 & 0 & 0 & 2 & 2 \end{bmatrix} \\ & / \mathbb{Z}_4 \times \mathbb{Z}_2 \end{matrix}$	[3]
$(0, 8)$	$(4, 4)$	Resoln. of a Horrocks-Mumford quintic	[14, 3.2]
$(0, 8)$	$(4, 4)$	$\widehat{X^{19,19}}/\mathbb{Z}_3 \times \mathbb{Z}_2 \times \mathbb{Z}_2$	[1]
$(0, 8)$	$(4, 4)$	$X^{20,20}/\mathbb{Z}_6$	[5]
$(-4, 8)$	$(3, 5)$	$\begin{matrix} \mathbb{P}^1 & \begin{bmatrix} 2 & 0 & 0 \\ 0 & 0 & 2 \\ 1 & 1 & 0 \\ 1 & 1 & 0 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \end{bmatrix} \\ & / \mathbb{Z}_4 \times \mathbb{Z}_2 \end{matrix}$	$[3, 30]^{25}$
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Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-4, 8)$	$(3, 5)$	$\mathbb{P}^4 \begin{bmatrix} 2 & 2 & 0 & 0 & 1 \\ 0 & 0 & 2 & 2 & 1 \end{bmatrix} / \mathbb{Z}_4 \times \mathbb{Z}_2$	$[3, 30]^{25}$
$(-8, 8)$	$(2, 6)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \\ 0 & 2 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 2 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Q}_8$	$[1, 3]$
$(-8, 8)$	$(2, 6)$	$\mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \\ 0 & 2 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 2 & 0 & 0 & 0 \\ 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_8$	$[3]$
$(-8, 8)$	$(2, 6)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Q}_8$	$[1, 3]$
$(-8, 8)$	$(2, 6)$	$\mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_8$	$[3]$
$(2, 7)$	$(4, 3)$	$(X^{8,44}/\widehat{\text{Dic}_3})^\sharp$	$[35]$
$(-6, 7)$	$(2, 5)$	$(X^{2,52}/\widehat{\mathbb{Z}_{10}})^\sharp$	$[4]^{26}$
$(-10, 7)$	$(1, 6)$	$\mathbb{P}^4 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 \\ 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_5 \times \mathbb{Z}_2$	$[1]$
<i>Continued on the following page</i>			

²⁵This manifold corresponds to the $\mathbb{Z}_4 \times \mathbb{Z}_2$ quotient of a manifold embedded in $d\mathbb{P}_4 \times d\mathbb{P}_4$.

²⁶ $X^{2,52}$ is the family of bilinears in $\mathbb{P}^4 \times \mathbb{P}^4$.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(0, 6)$	$(3, 3)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 1 \\ 0 & 2 \\ 2 & 0 \\ 0 & 2 \\ 2 & 0 \end{bmatrix} / G, \quad G \in \{\mathbb{Q}_8, \mathbb{Z}_4 \times \mathbb{Z}_2, \mathbb{Z}_8\}$	[3]
$(0, 6)$	$(3, 3)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 1 \\ 0 & 1 & 0 & 0 & 0 & 1 \\ 0 & 0 & 1 & 0 & 0 & 1 \end{bmatrix} / \mathbb{Z}_3 \times \mathbb{Z}_2$	[1]
$(0, 6)$	$(3, 3)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^4 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & 2 & 2 & 0 & 0 \\ 0 & 1 & 0 & 0 & 2 & 2 \end{bmatrix} / G, \quad G \in \{\mathbb{Q}_8, \mathbb{Z}_8\}$	[3]
$(0, 6)$	$(3, 3)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 1 \\ 3 & 0 \\ 0 & 3 \end{bmatrix} / G, \quad G \in \{\mathbb{Z}_3 \times \mathbb{Z}_3, \mathbb{Q}_8, \mathbb{Z}_4 \times \mathbb{Z}_2, \mathbb{Z}_3 \times \mathbb{Z}_2, \mathbb{Z}_5\}$	[1, 21]
$(0, 6)$	$(3, 3)$	$X^{20,20}/G, \quad G \in \{\mathbb{Z}_8, \mathbb{Q}_8\}$	[5]
$(-4, 6)$	$(2, 4)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^4 \\ \mathbb{P}^4 \end{matrix} \begin{bmatrix} 1 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 & 1 \\ 1 & 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} / \mathbb{Z}_5 \times \mathbb{Z}_2$	[1]
<i>Continued on the following page</i>			

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-4, 6)$	$(2, 4)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 2 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 2 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 2 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 2 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^3 \begin{bmatrix} 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / G, \quad G \in \{\mathbb{Z}_4 \rtimes \mathbb{Z}_4, \mathbb{Z}_8 \times \mathbb{Z}_2\}$	[3]
$(-4, 6)$	$(2, 4)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 1 & 1 & 0 & 0 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 1 & 1 & 0 & 0 \end{bmatrix} \\ \mathbb{P}^1 \begin{bmatrix} 0 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \end{bmatrix} \\ \mathbb{P}^7 \begin{bmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \end{bmatrix} \end{array} / G, \quad G \in \{\mathbb{Z}_4 \rtimes \mathbb{Z}_4, \mathbb{Z}_8 \times \mathbb{Z}_2\}$	[3]
$(-4, 6)$	$(2, 4)$	$\begin{array}{l} \mathbb{P}^4 \begin{bmatrix} 2 & 2 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 0 & 0 & 2 & 2 & 1 \end{bmatrix} \end{array} / \mathbb{Q}_8$	[1, 3]
$(-4, 6)$	$(2, 4)$	$\begin{array}{l} \mathbb{P}^4 \begin{bmatrix} 2 & 2 & 0 & 0 & 1 \end{bmatrix} \\ \mathbb{P}^4 \begin{bmatrix} 0 & 0 & 2 & 2 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_8$	[3]
$(-8, 6)$	$(1, 5)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 2 \\ 2 \\ 2 \\ 2 \end{bmatrix} \end{array} / G, \quad G \in \{\mathbb{Z}_2 \times \mathbb{Q}_8, \mathbb{Z}_4 \times \mathbb{Z}_4, \mathbb{Z}_4 \rtimes \mathbb{Z}_4, \mathbb{Z}_8 \rtimes \mathbb{Z}_2, \mathbb{Z}_8 \times \mathbb{Z}_2\}$	[3] ²⁷
$(-8, 6)$	$(1, 5)$	$\begin{array}{l} \mathbb{P}^1 \begin{bmatrix} 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \\ 1 & 1 \end{bmatrix} \end{array} / \mathbb{Z}_{10}$	[1, 3]
$(-8, 6)$	$(1, 5)$	$\mathbb{P}^7 \begin{bmatrix} 2 & 2 & 2 & 2 \end{bmatrix} / G, \quad G \in \{\mathbb{Z}_2 \times \mathbb{Q}_8, \mathbb{Z}_4 \rtimes \mathbb{Z}_4, \mathbb{Z}_4 \times \mathbb{Z}_2 \times \mathbb{Z}_2, \mathbb{Z}_4 \times \mathbb{Z}_4, \mathbb{Z}_8 \times \mathbb{Z}_2\}$	[3, 19, 36, 40]
$(-8, 6)$	$(1, 5)$	$\mathbb{P}^4[5] / \mathbb{Z}_5 \times \mathbb{Z}_5$	—
$(-2, 5)$	$(2, 3)$	$(X^{\widehat{8,44}} / \widehat{\text{Dic}_3})^\sharp$	[4]
<i>Continued on the following page</i>			

²⁷Some of these constructions are also discussed in [1, 30, 39].

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-6, 5)$	$(1, 4)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 0 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \\ 0 & 1 & 1 \\ 1 & 0 & 1 \\ 1 & 0 & 1 \end{bmatrix} / G, \quad G \in \{\mathbb{Z}_{12}, \mathbb{Z}_3 \rtimes \mathbb{Z}_4\}$	$[3, 23, 30]^{28}$
$(-6, 5)$	$(1, 4)$	$\begin{matrix} \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \\ \mathbb{P}^2 \end{matrix} \begin{bmatrix} 1 & 1 & 0 & 0 & 1 \\ 1 & 1 & 0 & 0 & 1 \\ 0 & 0 & 1 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 \end{bmatrix} / G, \quad G \in \{\mathbb{Z}_{12}, \mathbb{Z}_3 \rtimes \mathbb{Z}_4\}$	$[3, 23, 30]^{28}$
$(4, 4)$	$(3, 1)$	$(\widehat{X^{19,19}/\text{Dic}_3})^\sharp$, Resoln. of $(\widehat{X^{5,45}/\mathbb{Z}_{10} \times \mathbb{Z}_2})^\sharp$	$[41]^{29}$
$(0, 4)$	$(2, 2)$	$(\widehat{X^{5,45}/\mathbb{Z}_{10} \times \mathbb{Z}_2})^\sharp$	$[41]^{29}$
$(0, 4)$	$(2, 2)$	$\begin{matrix} \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \\ \mathbb{P}^1 \end{matrix} \begin{bmatrix} 1 & 1 \\ 0 & 2 \\ 2 & 0 \\ 0 & 2 \\ 2 & 0 \end{bmatrix} / G, \quad G \in \{\mathbb{Z}_2 \times \mathbb{Q}_8, \mathbb{Z}_4 \rtimes \mathbb{Z}_4, \mathbb{Z}_8 \rtimes \mathbb{Z}_2, \\ \mathbb{Z}_4 \times \mathbb{Z}_4, \mathbb{Z}_8 \times \mathbb{Z}_2\}$	$[3]$
$(0, 4)$	$(2, 2)$	Resoln. of Pfaffian CY with 49 nodes	$[12]$
$(0, 4)$	$(2, 2)$	$X^{19,19}/G$, $G \in \{\mathbb{Z}_{12}, \text{Dic}_3\}$	$[23]$
$(0, 4)$	$(2, 2)$	$X^{20,20}/\mathbb{Z}_{12}$	$[5]$
$(-4, 4)$	$(1, 3)$	$X^{5,45}/\mathbb{Z}_{10} \times \mathbb{Z}_2$	$[1, 3]$
<i>Continued on the following page</i>			

²⁸The cover manifold for these quotients is a hypersurface in $d\mathbb{P}_6 \times d\mathbb{P}_6$.

²⁹ $X^{19,19}$ is isomorphic to the split bicubic or the Schoen manifold, whereas $X^{5,45}$ is defined in ²¹. The resolutions here are of \mathbb{Z}_2 -hyperconifold singularities.

Table 1 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(-4, 4)$	$(1, 3)$	$\mathbb{P}^7 \left[\begin{smallmatrix} 2 & 2 & 2 & 2 \end{smallmatrix} \right] / G$, $G \in \{\mathbb{Z}_2 \times \mathbb{Z}_2 \times \mathbb{Q}_8, \mathbb{Z}_2 \times (\mathbb{Z}_4 \rtimes \mathbb{Z}_4),$ $\mathbb{Z}_4 \rtimes \mathbb{Q}_8, (\mathbb{Z}_4 \times \mathbb{Z}_2) \rtimes \mathbb{Z}_4,$ $\mathbb{Z}_4 \times \mathbb{Z}_4 \times \mathbb{Z}_2, \mathbb{Z}_8 \rtimes \mathbb{Z}_4(1),$ $\mathbb{Z}_8 \rtimes \mathbb{Z}_4(2), (\mathbb{Z}_8 \times \mathbb{Z}_2) \rtimes \mathbb{Z}_2, \mathbb{Z}_8 \times \mathbb{Z}_4\}$	$[3, 19, 36, 40]^{30}$
$(0, 2)$	$(1, 1)$	$X^{20,20}/G$, $G \in \{SL(2, 3), \mathbb{Z}_3 \rtimes \mathbb{Z}_8, \mathbb{Z}_3 \times \mathbb{Q}_8\}$	[5]

Table 2: Hodge numbers of various resolutions of the manifold $\mathbb{P}^7[2 \ 2 \ 2 \ 2]$.

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
$(40, 24)$	$(22, 2)$	$\widehat{\widehat{\mathfrak{X}}}/G$, $G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
$(32, 24)$	$(20, 4)$	$\widehat{\widehat{\mathfrak{X}}}/G$, $G \in \{\mathbb{Z}_2, \mathbb{Z}_2^3, \mathbb{Z}_2^5\}$	[27]
$(16, 24)$	$(16, 8)$	$\widehat{\widehat{\mathfrak{X}}}/G$, $G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
$(44, 22)$	$(22, 0)$	$\widehat{\widehat{\mathfrak{X}}}/G$, $G \in \{\mathbb{Z}_2, \mathbb{Z}_2^3, \mathbb{Z}_2^5\}$	[27]
$(40, 20)$	$(20, 0)$	$\widehat{\widehat{\mathfrak{X}}}/G$, $G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
$(32, 20)$	$(18, 2)$	$\widehat{\widehat{\mathfrak{X}}}/G$, $G \in \{\mathbb{Z}_2, \mathbb{Z}_2^3\}$	[27]
$(16, 20)$	$(14, 6)$	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^2$	[27]
$(8, 20)$	$(12, 8)$	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
$(38, 19)$	$(19, 0)$	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
<i>Continued on the following page</i>			

³⁰The two semi-direct products $\mathbb{Z}_8 \rtimes \mathbb{Z}_4(1)$ and $\mathbb{Z}_8 \rtimes \mathbb{Z}_4(2)$ correspond to the presentations $\langle a, b \mid a^8 = b^4 = e, bab^{-1} = a^3 \rangle$ and $\langle a, b \mid a^8 = b^4 = e, bab^{-1} = a^5 \rangle$.

Table 2 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
(0, 20)	(10, 10)	$\mathbb{P}^7[2 \ 2 \ 2 \ 2]^\sharp$	[14, 19]
(28, 18)	(16, 2)	$\widehat{\widehat{\mathfrak{X}}}/G, G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
(20, 18)	(14, 4)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(26, 17)	(15, 2)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(32, 16)	(16, 0)	$\widehat{\widehat{\mathfrak{X}}}/G, G \in \{\mathbb{Z}_2, \mathbb{Z}_2^3\}$	[27]
(28, 16)	(15, 1)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^2$	[27]
(16, 16)	(12, 4)	$\widehat{\widehat{\mathfrak{X}}}/G, G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
(26, 15)	(14, 1)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(28, 14)	(14, 0)	$\widehat{\widehat{\mathfrak{X}}}/G, G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
(20, 14)	(12, 2)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(26, 13)	(13, 0)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(16, 12)	(10, 2)	$\widehat{\widehat{\mathfrak{X}}}/G, G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
(14, 11)	(9, 2)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(20, 10)	(10, 0)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(12, 10)	(8, 2)	CY resolution of $\widehat{\widehat{\mathfrak{X}}}/G, G = 48$	[27]
(8, 10)	(7, 3)	CY resolution of $\widehat{\widehat{\mathfrak{X}}}/G, G = 32$	[27]
(16, 8)	(8, 0)	$\widehat{\widehat{\mathfrak{X}}}/G, G \in \{\mathbb{Z}_2^2, \mathbb{Z}_2^4\}$	[27]
(8, 8)	(6, 2)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
(8, 4)	(4, 0)	$\widehat{\widehat{\mathfrak{X}}}/\mathbb{Z}_2^3$	[27]
<i>Continued on the following page</i>			

Table 2 – *Continued from previous page*

(χ, y)	(h^{11}, h^{21})	Manifold	Reference
(0, 4)	(2, 2)	$\mathbb{P}^7[\widehat{2\ 2\ 2\ 2}]^\sharp/G$, $ G $ divides 64	[14, 19, 40]
(4, 2)	(2, 0)	$\mathbb{P}^7[\widehat{2\ 2\ 2\ 2}]^\sharp/G$, $ G = 16$	[27]

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