

Table II

17 de agosto de 2022

Table II: Links with torsion in Cheltsov's list

Weights	Polynomial	Type	d	μ	$H_3(M, \mathbb{Z})$
(1,1,1,2,4)	$z_0^8 + z_1^8 + z_2^8 + z_3^4 + z_4^2$	BP	8	1029	$\mathbb{Z}^{128} \oplus \mathbb{Z}_4$
(2,2,3,1,1)	$z_0^4 + z_0 z_1^3 + z_1 z_2^2 + z_2 z_3^5 + z_3 z_4^7$	Chain	8	735	$\mathbb{Z}^{90} \oplus \mathbb{Z}_8 \oplus (\mathbb{Z}_2)^2$
(3,1,4,1,1)	$z_0^3 + z_0 z_1^6 + z_1 z_2^2 + z_2 z_3^5 + z_3 z_4^8$	Chain	9	1280	$\mathbb{Z}^{142} \oplus \mathbb{Z}_3$
(3,3,2,1,1)	$z_0^3 + z_0 z_1^2 + z_1 z_2^3 + z_2 z_3^7 + z_3 z_4^8$	Chain	9	896	$\mathbb{Z}^{98} \oplus \mathbb{Z}_9 \oplus \mathbb{Z}_3$
(5,1,3,1,1)	$z_0^2 + z_0 z_1^5 + z_1 z_2^3 + z_2 z_3^7 + z_3 z_4^9$	Chain	10	1701	$\mathbb{Z}^{170} \oplus \mathbb{Z}_2$
(1,1,2,2,5)	$z_0^{10} + z_1^{10} + z_2^5 + z_3^5 + z_4^2$	BP	10	1296	$\mathbb{Z}^{128} \oplus (\mathbb{Z}_2)^4$
(2,4,3,1,1)	$z_0^5 + z_0 z_1^2 + z_1 z_2^2 + z_2 z_3^7 + z_3 z_4^9$	Chain	10	1134	$\mathbb{Z}^{112} \oplus \mathbb{Z}_{10} \oplus \mathbb{Z}_2$
(1,5,3,2,1)	$z_0^{11} + z_0 z_1^2 + z_1 z_2^2 + z_2 z_3^4 + z_3 z_4^9$	Chain	11	1440	$\mathbb{Z}^{130} \oplus \mathbb{Z}_{11}$
(1,1,2,3,6)	$z_0^{12} + z_1^{12} + z_2^6 + z_3^4 + z_4^2$	BP	12	1815	$\mathbb{Z}^{150} \oplus \mathbb{Z}_{12}$
(4,2,5,1,1)	$z_0^3 + z_0 z_1^4 + z_1 z_2^2 + z_2 z_3^7 + z_3 z_4^{11}$	Chain	12	1694	$\mathbb{Z}^{140} \oplus \mathbb{Z}_6 \oplus \mathbb{Z}_2$
(1,1,3,4,4)	$z_0^{12} + z_1^{12} + z_2^4 + z_3^3 + z_4^3$	BP	12	1452	$\mathbb{Z}^{120} \oplus (\mathbb{Z}_4)^2$
(3,2,2,5,1)	$z_0^4 + z_1^6 + z_1 z_2^5 + z_2 z_3^2 + z_3 z_4^7$	BP+Chain	12	1155	$\mathbb{Z}^{94} \oplus \mathbb{Z}_4 \oplus (\mathbb{Z}_2)^4$
(1,2,3,3,4)	$z_0^{12} + z_1^6 + z_2^4 + z_3^4 + z_4^3$	BP	12	990	$\mathbb{Z}^{80} \oplus (\mathbb{Z}_6)^2 \oplus \mathbb{Z}_3$
(1,4,3,5,1)	$z_0^{13} + z_0 z_1^3 + z_1 z_2^3 + z_2 z_3^2 + z_3 z_4^8$	Chain	13	1728	$\mathbb{Z}^{132} \oplus \mathbb{Z}_{13}$
(7,2,4,1,1)	$z_0^2 + z_1^7 + z_1 z_2^3 + z_2 z_3^{10} + z_3 z_4^{13}$	BP+Chain	14	2535	$\mathbb{Z}^{180} \oplus (\mathbb{Z}_2)^3$
(7,2,2,3,1)	$z_0^2 + z_1^7 + z_1 z_2^6 + z_2 z_3^4 + z_3 z_4^{11}$	BP+Chain	14	1716	$\mathbb{Z}^{120} \oplus (\mathbb{Z}_2)^6$
(2,4,5,3,1)	$z_0^7 + z_0 z_1^3 + z_1 z_2^2 + z_2 z_3^3 + z_3 z_4^{11}$	Chain	14	1287	$\mathbb{Z}^{90} \oplus \mathbb{Z}_{14} \oplus (\mathbb{Z}_2)^2$
(5,2,1,7,1)	$z_0^3 + z_0 z_1^5 + z_1 z_2^{13} + z_2 z_3^2 + z_3 z_4^8$	Chain	15	2912	$\mathbb{Z}^{194} \oplus \mathbb{Z}_3$

Weights	Polynomial	Type	d	μ	$H_3(M, \mathbb{Z})$
(3,4,1,7,1)	$z_0^5 + z_0 z_1^3 + z_1 z_2^{11} + z_2 z_3^2 + z_3 z_4^8$	Chain	15	2464	$\mathbb{Z}^{164} \oplus \mathbb{Z}_5$
(5,3,6,1,1)	$z_0^3 + z_1^5 + z_1 z_2^2 + z_2 z_3^9 + z_3 z_4^{14}$	BP+Chain	15	2352	$\mathbb{Z}^{156} \oplus (\mathbb{Z}_3)^2$
(3,5,5,2,1)	$z_0^5 + z_1^3 + z_1 z_2^2 + z_2 z_3^5 + z_3 z_4^{13}$	BP+Chain	15	1456	$\mathbb{Z}^{96} \oplus (\mathbb{Z}_5)^2$
(5,3,3,4,1)	$z_0^3 + z_1^5 + z_1 z_2^4 + z_2 z_3^3 + z_3 z_4^{11}$	BP+Chain	15	1232	$\mathbb{Z}^{80} \oplus (\mathbb{Z}_3)^4$
(8,2,1,5,1)	$z_0^2 + z_0 z_1^4 + z_1 z_2^{14} + z_2 z_3^3 + z_3 z_4^{11}$	Chain	16	3465	$\mathbb{Z}^{216} \oplus \mathbb{Z}_4$
(8,4,3,1,1)	$z_0^2 + z_0 z_1^2 + z_1 z_2^4 + z_2 z_3^{13} + z_3 z_4^{15}$	Chain	16	2925	$\mathbb{Z}^{182} \oplus \mathbb{Z}_8$
(4,6,5,1,1)	$z_0^4 + z_0 z_1^2 + z_1 z_2^2 + z_2 z_3^{11} + z_3 z_4^{15}$	Chain	16	2475	$\mathbb{Z}^{154} \oplus \mathbb{Z}_8$
(4,2,7,3,1)	$z_0^4 + z_0 z_1^6 + z_1 z_2^2 + z_2 z_3^3 + z_3 z_4^{13}$	Chain	16	1755	$\mathbb{Z}^{108} \oplus \mathbb{Z}_8 \oplus (\mathbb{Z}_2)^2$
(1,2,5,3,7)	$z_0^{17} + z_0 z_1^8 + z_1 z_2^3 + z_2 z_3^4 + z_3 z_4^2$	Chain	17	1920	$\mathbb{Z}^{112} \oplus \mathbb{Z}_{17}$
(1,1,2,6,9)	$z_0^{18} + z_1^{18} + z_2^9 + z_3^3 + z_4^2$	BP	18	4624	$\mathbb{Z}^{256} \oplus (\mathbb{Z}_2)^2$
(9,3,5,1,1)	$z_0^2 + z_0 z_1^3 + z_1 z_2^3 + z_2 z_3^{13} + z_3 z_4^{17}$	Chain	18	3757	$\mathbb{Z}^{208} \oplus \mathbb{Z}_6$
(6,4,7,1,1)	$z_0^3 + z_0 z_1^3 + z_1 z_2^2 + z_2 z_3^{11} + z_3 z_4^{17}$	Chain	18	3179	$\mathbb{Z}^{176} \oplus \mathbb{Z}_6$
(9,3,2,4,1)	$z_0^2 + z_1^6 + z_2^9 + z_2 z_3^4 + z_3 z_4^{14}$	BP+Chain	18	2380	$\mathbb{Z}^{130} \oplus \mathbb{Z}_6 \oplus (\mathbb{Z}_2)^3$
(3,2,8,5,1)	$z_0^6 + z_1^9 + z_1 z_2^2 + z_2 z_3^2 + z_3 z_4^{13}$	BP+Chain	18	2210	$\mathbb{Z}^{122} \oplus \mathbb{Z}_6 \oplus \mathbb{Z}_2$
(6,4,3,5,1)	$z_0^3 + z_0 z_1^3 + z_2^6 + z_2 z_3^3 + z_3 z_4^{13}$	Chain+Chain	18	1547	$\mathbb{Z}^{84} \oplus \mathbb{Z}_{18} \oplus \mathbb{Z}_3$
(1,3,4,5,7)	$z_0^{19} + z_0 z_1^6 + z_1 z_2^4 + z_2 z_3^3 + z_3 z_4^2$	Chain	19	1728	$\mathbb{Z}^{90} \oplus \mathbb{Z}_{19}$
(1,1,4,5,10)	$z_0^{20} + z_1^{20} + z_2^5 + z_3^4 + z_4^2$	BP	20	4332	$\mathbb{Z}^{216} \oplus \mathbb{Z}_5$
(5,10,2,3,1)	$z_0^4 + z_1^2 + z_1 z_2^5 + z_2 z_3^6 + z_3 z_4^{17}$	BP+Chain	20	2907	$\mathbb{Z}^{144} \oplus \mathbb{Z}_{20}$
(5,4,2,9,1)	$z_0^4 + z_1^5 + z_1 z_2^8 + z_2 z_3^2 + z_3 z_4^{11}$	BP+Chain	20	2508	$\mathbb{Z}^{124} \oplus (\mathbb{Z}_2)^4$
(5,2,6,7,1)	$z_0^4 + z_1^{10} + z_1 z_2^3 + z_2 z_3^2 + z_3 z_4^{13}$	BP+Chain	20	2223	$\mathbb{Z}^{110} \oplus \mathbb{Z}_4 \oplus (\mathbb{Z}_2)^2$
(5,4,8,3,1)	$z_0^4 + z_1^5 + z_1 z_2^2 + z_2 z_3^4 + z_3 z_4^{17}$	BP+Chain	20	1938	$\mathbb{Z}^{96} \oplus (\mathbb{Z}_4)^2$
(7,1,5,8,1)	$z_0^3 + z_0 z_1^{14} + z_1 z_2^4 + z_2 z_3^2 + z_3 z_4^{13}$	Chain	21	4160	$\mathbb{Z}^{198} \oplus \mathbb{Z}_3$
(7,3,9,2,1)	$z_0^3 + z_1^7 + z_1 z_2^2 + z_2 z_3^6 + z_3 z_4^{19}$	BP+Chain	21	3040	$\mathbb{Z}^{144} \oplus (\mathbb{Z}_3)^2$
(7,3,6,5,1)	$z_0^3 + z_1^7 + z_1 z_2^3 + z_2 z_3^3 + z_3 z_4^{16}$	BP+Chain	21	1920	$\mathbb{Z}^{90} \oplus (\mathbb{Z}_3)^3$
(11,1,7,3,1)	$z_0^2 + z_0 z_1^{11} + z_1 z_2^3 + z_2 z_3^5 + z_3 z_4^{19}$	Chain	22	5985	$\mathbb{Z}^{272} \oplus \mathbb{Z}_2$
(11,1,1,6,4)	$z_0^2 + z_1^{22} + z_2^{22} + z_4 z_3^3 + z_3 z_4^4$	BP+Cycle	22	5292	$\mathbb{Z}^{240} \oplus (\mathbb{Z}_2)^2$

Weights	Polynomial	Type	d	μ	$H_3(M, \mathbb{Z})$
(1,1,3,8,12)	$z_0^{24} + z_1^{24} + z_2^8 + z_3^3 + z_4^2$	BP	24	7406	$\mathbb{Z}^{308} \oplus \mathbb{Z}_3$
(8,6,9,1,1)	$z_0^3 + z_1^4 + z_1 z_2^2 + z_2 z_3^{15} + z_3 z_4^{23}$	BP+Chain	24	5290	$\mathbb{Z}^{220} \oplus \mathbb{Z}_3$
(2,12,3,7,1)	$z_0^{12} + z_1^2 + z_1 z_2^4 + z_2 z_3^3 + z_3 z_4^{17}$	BP+Chain	24	4301	$\mathbb{Z}^{178} \oplus \mathbb{Z}_{12}$
(3,8,2,11,1)	$z_0^8 + z_1^3 + z_1 z_2^8 + z_2 z_3^2 + z_3 z_4^{13}$	BP+Chain	24	4186	$\mathbb{Z}^{174} \oplus (\mathbb{Z}_2)^2$
(3,12,4,5,1)	$z_0^8 + z_1^2 + z_1 z_2^3 + z_2 z_3^4 + z_3 z_4^{19}$	BP+Chain	24	3059	$\mathbb{Z}^{126} \oplus \mathbb{Z}_{24}$
(3,4,10,7,1)	$z_0^8 + z_1^6 + z_1 z_2^2 + z_2 z_3^2 + z_3 z_4^{17}$	BP+Chain	24	2737	$\mathbb{Z}^{114} \oplus \mathbb{Z}_4$
(8,6,3,7,1)	$z_0^3 + z_1^4 + z_1 z_2^6 + z_2 z_3^3 + z_3 z_4^{17}$	BP+Chain	24	2346	$\mathbb{Z}^{96} \oplus (\mathbb{Z}_3)^3$
(4,6,9,5,1)	$z_0^6 + z_1^4 + z_1 z_2^2 + z_2 z_3^3 + z_3 z_4^{19}$	BP+Chain	24	2185	$\mathbb{Z}^{90} \oplus \mathbb{Z}_{12}$
(5,4,7,9,1)	$z_0^5 + z_0 z_1^5 + z_1 z_2^3 + z_2 z_3^2 + z_3 z_4^{16}$	Chain	25	2304	$\mathbb{Z}^{92} \oplus \mathbb{Z}_5$
(13,1,5,7,1)	$z_0^2 + z_0 z_1^{13} + z_1 z_2^5 + z_2 z_3^3 + z_3 z_4^{19}$	Chain	26	7125	$\mathbb{Z}^{274} \oplus \mathbb{Z}_2$
(13,2,8,3,1)	$z_0^2 + z_1^{13} + z_1 z_2^3 + z_2 z_3^6 + z_3 z_4^{23}$	BP+Chain	26	5175	$\mathbb{Z}^{198} \oplus (\mathbb{Z}_2)^3$
(13,2,6,5,1)	$z_0^2 + z_1^{13} + z_1 z_2^4 + z_2 z_3^4 + z_3 z_4^{21}$	BP+Chain	26	4200	$\mathbb{Z}^{160} \oplus (\mathbb{Z}_2)^4$
(9,2,5,11,1)	$z_0^3 + z_0 z_1^9 + z_1 z_2^5 + z_2 z_3^2 + z_3 z_4^{16}$	Chain	27	4160	$\mathbb{Z}^{154} \oplus \mathbb{Z}_3$
(9,6,7,5,1)	$z_0^3 + z_0 z_1^3 + z_1 z_2^3 + z_2 z_3^4 + z_3 z_4^{22}$	Chain	27	2288	$\mathbb{Z}^{84} \oplus \mathbb{Z}_9$
(4,14,7,3,1)	$z_0^7 + z_1^2 + z_1 z_2^2 + z_2 z_3^7 + z_3 z_4^{25}$	BP+Chain	28	4050	$\mathbb{Z}^{144} \oplus \mathbb{Z}_7$
(7,4,6,11,1)	$z_0^4 + z_1^7 + z_1 z_2^4 + z_2 z_3^2 + z_3 z_4^{17}$	BP+Chain	28	2754	$\mathbb{Z}^{98} \oplus (\mathbb{Z}_2)^2$
(15,10,4,1,1)	$z_0^2 + z_1^3 + z_1 z_2^5 + z_2 z_3^{26} + z_3 z_4^{29}$	BP+Chain	30	10933	$\mathbb{Z}^{364} \oplus \mathbb{Z}_2$
(15,6,8,1,1)	$z_0^2 + z_1^5 + z_1 z_2^3 + z_2 z_3^{22} + z_3 z_4^{29}$	BP+Chain	30	9251	$\mathbb{Z}^{308} \oplus \mathbb{Z}_2$
(1,2,3,10,15)	$z_0^{30} + z_1^{15} + z_2^{10} + z_3^3 + z_4^2$	BP	30	7308	$\mathbb{Z}^{242} \oplus \mathbb{Z}_6 \oplus \mathbb{Z}_2$
(15,6,2,7,1)	$z_0^2 + z_1^5 + z_1 z_2^{12} + z_2 z_3^4 + z_3 z_4^{23}$	BP+Chain	30	5336	$\mathbb{Z}^{176} \oplus (\mathbb{Z}_2)^4$
(3,10,4,13,1)	$z_0^{10} + z_1^3 + z_1 z_2^5 + z_2 z_3^2 + z_3 z_4^{17}$	BP+Chain	30	4437	$\mathbb{Z}^{148} \oplus \mathbb{Z}_2$
(15,5,6,4,1)	$z_0^2 + z_1^6 + z_2^5 + z_2 z_3^6 + z_3 z_4^{26}$	BP+Chain	30	3770	$\mathbb{Z}^{124} \oplus \mathbb{Z}_{10} \oplus \mathbb{Z}_2$
(5,6,8,11,1)	$z_0^6 + z_1^5 + z_1 z_2^3 + z_2 z_3^2 + z_3 z_4^{19}$	BP+Chain	30	2755	$\mathbb{Z}^{92} \oplus \mathbb{Z}_2$
(16,2,5,9,1)	$z_0^2 + z_0 z_1^8 + z_1 z_2^6 + z_2 z_3^3 + z_3 z_4^{23}$	Chain	32	6417	$\mathbb{Z}^{200} \oplus \mathbb{Z}_4$
(16,4,7,5,1)	$z_0^2 + z_0 z_1^4 + z_1 z_2^4 + z_2 z_3^5 + z_3 z_4^{27}$	Chain	32	4185	$\mathbb{Z}^{130} \oplus \mathbb{Z}_8$
(17,1,3,10,4)	$z_0^2 + z_0 z_1^{17} + z_1 z_2^{11} + z_4 z_3^3 + z_3 z_4^6$	Chain+Cycle	34	6138	$\mathbb{Z}^{180} \oplus (\mathbb{Z}_2)^2$

Weights	Polynomial	Type	d	μ	$H_3(M, \mathbb{Z})$
(4,18,3,11,1)	$z_0^9 + z_1^2 + z_1 z_2^6 + z_2 z_3^3 + z_3 z_4^{25}$	BP+Chain	36	7000	$\mathbb{Z}^{194} \oplus \mathbb{Z}_3$
(9,12,8,7,1)	$z_0^4 + z_1^3 + z_1 z_2^3 + z_2 z_3^4 + z_3 z_4^{29}$	BP+Chain	36	3045	$\mathbb{Z}^{84} \oplus \mathbb{Z}_4$
(19,1,11,3,5)	$z_0^2 + z_1^{38} + z_4 z_2^3 + z_2 z_3^9 + z_3 z_4^7$	BP+Cycle	38	6993	$\mathbb{Z}^{184} \oplus \mathbb{Z}_2$
(8,20,5,7,1)	$z_0^5 + z_1^2 + z_1 z_2^4 + z_2 z_3^5 + z_3 z_4^{33}$	BP+Chain	40	5148	$\mathbb{Z}^{128} \oplus \mathbb{Z}_5$
(21,14,2,5,1)	$z_0^2 + z_1^3 + z_1 z_2^{14} + z_2 z_3^8 + z_3 z_4^{37}$	BP+Chain	42	12136	$\mathbb{Z}^{288} \oplus (\mathbb{Z}_2)^2$
(21,3,14,4,1)	$z_0^2 + z_1^{14} + z_2^3 + z_2 z_3^7 + z_3 z_4^{38}$	BP+Chain	42	10127	$\mathbb{Z}^{240} \oplus \mathbb{Z}_6$
(16,24,3,5,1)	$z_0^3 + z_1^2 + z_1 z_2^8 + z_2 z_3^9 + z_3 z_4^{43}$	BP+Chain	48	12126	$\mathbb{Z}^{252} \oplus \mathbb{Z}_3$
(25,10,8,7,1)	$z_0^2 + z_1^5 + z_1 z_2^5 + z_2 z_3^6 + z_3 z_4^{43}$	BP+Chain	50	6321	$\mathbb{Z}^{126} \oplus \mathbb{Z}_2$
(27,18,4,5,1)	$z_0^2 + z_1^3 + z_1 z_2^9 + z_2 z_3^{10} + z_3 z_4^{49}$	BP+Chain	54	12985	$\mathbb{Z}^{240} \oplus \mathbb{Z}_2$