

# TABLES OF FAILED CANDIDATE SMOOTH FANO WEIGHTED COMPLETE INTERSECTIONS

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In this document, we list candidate Fano wieghted complete intesections that fails to be smooth, in each dimension  $6 \leq n \leq 10$ .

Table 1: Fano 6-folds

#	$c$	$I$	Variety
1	2	1	$X_{18,3} \subset \mathbb{P}(1^7, 6, 9)$
2	2	3	$X_{12,2} \subset \mathbb{P}(1^7, 4, 6)$
3	3	1	$X_{12,3,2} \subset \mathbb{P}(1^8, 4, 6)$
4	3	2	$X_{12,2,2} \subset \mathbb{P}(1^8, 4, 6)$
5	4	1	$X_{12,2,2,2} \subset \mathbb{P}(1^9, 4, 6)$

Table 2: Fano 7-folds

#	$c$	$I$	Variety
1	2	2	$X_{18,3} \subset \mathbb{P}(1^8, 6, 9)$
2	2	4	$X_{12,2} \subset \mathbb{P}(1^8, 4, 6)$
3	3	2	$X_{12,3,2} \subset \mathbb{P}(1^9, 4, 6)$
4	3	3	$X_{12,2,2} \subset \mathbb{P}(1^9, 4, 6)$
5	4	1	$X_{12,3,2,2} \subset \mathbb{P}(1^{10}, 4, 6)$
6	4	2	$X_{12,2,2,2} \subset \mathbb{P}(1^{10}, 4, 6)$
7	5	1	$X_{12,2,2,2,2} \subset \mathbb{P}(1^{11}, 4, 6)$

Table 3: Fano 8-folds

#	$c$	$I$	Variety
1	2	1	$X_{20,2} \subset \mathbb{P}(1^9, 4, 10)$
2	2	1	$X_{24,4} \subset \mathbb{P}(1^9, 8, 12)$
3	2	3	$X_{18,3} \subset \mathbb{P}(1^9, 6, 9)$

#	$c$	$I$	Variety
4	2	5	$X_{12,2} \subset \mathbb{P}(1^9, 4, 6)$
5	3	1	$X_{12,5,2} \subset \mathbb{P}(1^{10}, 4, 6)$
6	3	1	$X_{12,8,2} \subset \mathbb{P}(1^9, 4^2, 6)$
7	3	1	$X_{18,3,3} \subset \mathbb{P}(1^{10}, 6, 9)$
8	3	1	$X_{18,4,3} \subset \mathbb{P}(1^9, 2, 6, 9)$
9	3	2	$X_{18,3,2} \subset \mathbb{P}(1^{10}, 6, 9)$
10	3	3	$X_{12,3,2} \subset \mathbb{P}(1^{10}, 4, 6)$
11	3	4	$X_{12,2,2} \subset \mathbb{P}(1^{10}, 4, 6)$
12	4	1	$X_{12,3,3,2} \subset \mathbb{P}(1^{11}, 4, 6)$
13	4	1	$X_{18,3,2,2} \subset \mathbb{P}(1^{11}, 6, 9)$
14	4	1	$X_{12,12,2,2} \subset \mathbb{P}(1^9, 4^2, 6^2)$
15	4	1	$X_{30,5,3,2} \subset \mathbb{P}(1^{10}, 6, 10, 15)$
16	4	2	$X_{12,3,2,2} \subset \mathbb{P}(1^{11}, 4, 6)$
17	4	3	$X_{12,2,2,2} \subset \mathbb{P}(1^{11}, 4, 6)$
18	5	1	$X_{12,3,2,2,2} \subset \mathbb{P}(1^{12}, 4, 6)$
19	5	2	$X_{12,2,2,2,2} \subset \mathbb{P}(1^{12}, 4, 6)$
20	6	1	$X_{12,2,2,2,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$

Table 4: Fano 9-folds

#	$c$	$I$	Variety
1	2	2	$X_{20,2} \subset \mathbb{P}(1^{10}, 4, 10)$
2	2	2	$X_{24,4} \subset \mathbb{P}(1^{10}, 8, 12)$
3	2	4	$X_{18,3} \subset \mathbb{P}(1^{10}, 6, 9)$
4	2	6	$X_{12,2} \subset \mathbb{P}(1^{10}, 4, 6)$
5	3	1	$X_{20,2,2} \subset \mathbb{P}(1^{11}, 4, 10)$
6	3	1	$X_{18,4,3} \subset \mathbb{P}(1^{11}, 6, 9)$
7	3	1	$X_{24,4,2} \subset \mathbb{P}(1^{11}, 8, 12)$
8	3	2	$X_{12,5,2} \subset \mathbb{P}(1^{11}, 4, 6)$
9	3	2	$X_{12,8,2} \subset \mathbb{P}(1^{10}, 4^2, 6)$
10	3	2	$X_{18,3,3} \subset \mathbb{P}(1^{11}, 6, 9)$
11	3	2	$X_{18,4,3} \subset \mathbb{P}(1^{10}, 2, 6, 9)$

#	$c$	$I$	Variety
12	3	3	$X_{18,3,2} \subset \mathbb{P}(1^{11}, 6, 9)$
13	3	4	$X_{12,3,2} \subset \mathbb{P}(1^{11}, 4, 6)$
14	3	5	$X_{12,2,2} \subset \mathbb{P}(1^{11}, 4, 6)$
15	4	1	$X_{12,5,2,2} \subset \mathbb{P}(1^{12}, 4, 6)$
16	4	1	$X_{12,8,2,2} \subset \mathbb{P}(1^{11}, 4^2, 6)$
17	4	1	$X_{18,3,3,2} \subset \mathbb{P}(1^{12}, 6, 9)$
18	4	2	$X_{12,3,3,2} \subset \mathbb{P}(1^{12}, 4, 6)$
19	4	2	$X_{18,3,2,2} \subset \mathbb{P}(1^{12}, 6, 9)$
20	4	2	$X_{12,12,2,2} \subset \mathbb{P}(1^{10}, 4^2, 6^2)$
21	4	2	$X_{30,5,3,2} \subset \mathbb{P}(1^{11}, 6, 10, 15)$
22	4	3	$X_{12,3,2,2} \subset \mathbb{P}(1^{12}, 4, 6)$
23	4	4	$X_{12,2,2,2} \subset \mathbb{P}(1^{12}, 4, 6)$
24	5	1	$X_{12,3,3,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$
25	5	1	$X_{18,3,2,2,2} \subset \mathbb{P}(1^{13}, 6, 9)$
26	5	1	$X_{12,12,2,2,2} \subset \mathbb{P}(1^{11}, 4^2, 6^2)$
27	5	1	$X_{30,5,3,2,2} \subset \mathbb{P}(1^{12}, 6, 10, 15)$
28	5	2	$X_{12,3,2,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$
29	5	3	$X_{12,2,2,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$
30	6	1	$X_{12,3,2,2,2,2} \subset \mathbb{P}(1^{14}, 4, 6)$
31	6	2	$X_{12,2,2,2,2,2} \subset \mathbb{P}(1^{14}, 4, 6)$
32	7	1	$X_{12,2,2,2,2,2,2} \subset \mathbb{P}(1^{15}, 4, 6)$

Table 5: Fano 10-folds

#	$c$	$I$	Variety
1	2	1	$X_{30,5} \subset \mathbb{P}(1^{11}, 10, 15)$
2	2	3	$X_{20,2} \subset \mathbb{P}(1^{11}, 4, 10)$
3	2	3	$X_{24,4} \subset \mathbb{P}(1^{11}, 8, 12)$
4	2	5	$X_{18,3} \subset \mathbb{P}(1^{11}, 6, 9)$
5	2	7	$X_{12,2} \subset \mathbb{P}(1^{11}, 4, 6)$
6	3	1	$X_{12,7,2} \subset \mathbb{P}(1^{12}, 4, 6)$
7	3	1	$X_{12,9,2} \subset \mathbb{P}(1^{11}, 3, 4, 6)$

#	$c$	$I$	Variety
8	3	1	$X_{20,3,2} \subset \mathbb{P}(1^{12}, 4, 10)$
9	3	1	$X_{12,12,2} \subset \mathbb{P}(1^{11}, 4, 6^2)$
10	3	1	$X_{12,12,2} \subset \mathbb{P}(1^{10}, 3, 4^2, 6)$
11	3	1	$X_{18,5,3} \subset \mathbb{P}(1^{12}, 6, 9)$
12	3	1	$X_{18,8,3} \subset \mathbb{P}(1^{11}, 4, 6, 9)$
13	3	1	$X_{18,10,3} \subset \mathbb{P}(1^{10}, 2, 5, 6, 9)$
14	3	1	$X_{24,4,3} \subset \mathbb{P}(1^{12}, 8, 12)$
15	3	1	$X_{24,4,4} \subset \mathbb{P}(1^{11}, 2, 8, 12)$
16	3	1	$X_{24,6,4} \subset \mathbb{P}(1^{10}, 2, 3, 8, 12)$
17	3	2	$X_{12,10,2} \subset \mathbb{P}(1^{11}, 4, 5, 6)$
18	3	2	$X_{20,2,2} \subset \mathbb{P}(1^{12}, 4, 10)$
19	3	2	$X_{18,4,3} \subset \mathbb{P}(1^{12}, 6, 9)$
20	3	2	$X_{24,4,2} \subset \mathbb{P}(1^{12}, 8, 12)$
21	3	3	$X_{12,5,2} \subset \mathbb{P}(1^{12}, 4, 6)$
22	3	3	$X_{12,8,2} \subset \mathbb{P}(1^{11}, 4^2, 6)$
23	3	3	$X_{18,3,3} \subset \mathbb{P}(1^{12}, 6, 9)$
24	3	3	$X_{18,4,3} \subset \mathbb{P}(1^{11}, 2, 6, 9)$
25	3	4	$X_{18,3,2} \subset \mathbb{P}(1^{12}, 6, 9)$
26	3	5	$X_{12,3,2} \subset \mathbb{P}(1^{12}, 4, 6)$
27	3	6	$X_{12,2,2} \subset \mathbb{P}(1^{12}, 4, 6)$
28	4	1	$X_{12,5,3,2} \subset \mathbb{P}(1^{13}, 4, 6)$
29	4	1	$X_{12,8,3,2} \subset \mathbb{P}(1^{12}, 4^2, 6)$
30	4	1	$X_{20,2,2,2} \subset \mathbb{P}(1^{13}, 4, 10)$
31	4	1	$X_{18,3,3,3} \subset \mathbb{P}(1^{13}, 6, 9)$
32	4	1	$X_{18,4,3,2} \subset \mathbb{P}(1^{13}, 6, 9)$
33	4	1	$X_{18,4,3,3} \subset \mathbb{P}(1^{12}, 2, 6, 9)$
34	4	1	$X_{18,4,4,3} \subset \mathbb{P}(1^{11}, 2^2, 6, 9)$
35	4	1	$X_{24,4,2,2} \subset \mathbb{P}(1^{13}, 8, 12)$
36	4	1	$X_{18,12,3,2} \subset \mathbb{P}(1^{11}, 4, 6^2, 9)$
37	4	1	$X_{30,5,4,3} \subset \mathbb{P}(1^{12}, 6, 10, 15)$
38	4	2	$X_{12,5,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$
39	4	2	$X_{12,8,2,2} \subset \mathbb{P}(1^{12}, 4^2, 6)$

#	$c$	$I$	Variety
40	4	2	$X_{18,3,3,2} \subset \mathbb{P}(1^{13}, 6, 9)$
41	4	3	$X_{12,3,3,2} \subset \mathbb{P}(1^{13}, 4, 6)$
42	4	3	$X_{18,3,2,2} \subset \mathbb{P}(1^{13}, 6, 9)$
43	4	3	$X_{12,12,2,2} \subset \mathbb{P}(1^{11}, 4^2, 6^2)$
44	4	3	$X_{30,5,3,2} \subset \mathbb{P}(1^{12}, 6, 10, 15)$
45	4	4	$X_{12,3,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$
46	4	5	$X_{12,2,2,2} \subset \mathbb{P}(1^{13}, 4, 6)$
47	5	1	$X_{12,3,3,3,2} \subset \mathbb{P}(1^{14}, 4, 6)$
48	5	1	$X_{12,5,2,2,2} \subset \mathbb{P}(1^{14}, 4, 6)$
49	5	1	$X_{12,8,2,2,2} \subset \mathbb{P}(1^{13}, 4^2, 6)$
50	5	1	$X_{18,3,3,2,2} \subset \mathbb{P}(1^{14}, 6, 9)$
51	5	1	$X_{12,12,3,2,2} \subset \mathbb{P}(1^{12}, 4^2, 6^2)$
52	5	1	$X_{30,5,3,3,2} \subset \mathbb{P}(1^{13}, 6, 10, 15)$
53	5	2	$X_{12,3,3,2,2} \subset \mathbb{P}(1^{14}, 4, 6)$
54	5	2	$X_{18,3,2,2,2} \subset \mathbb{P}(1^{14}, 6, 9)$
55	5	2	$X_{12,12,2,2,2} \subset \mathbb{P}(1^{12}, 4^2, 6^2)$
56	5	2	$X_{30,5,3,2,2} \subset \mathbb{P}(1^{13}, 6, 10, 15)$
57	5	3	$X_{12,3,2,2,2} \subset \mathbb{P}(1^{14}, 4, 6)$
58	5	4	$X_{12,2,2,2,2} \subset \mathbb{P}(1^{14}, 4, 6)$
59	6	1	$X_{12,3,3,2,2,2} \subset \mathbb{P}(1^{15}, 4, 6)$
60	6	1	$X_{18,3,2,2,2,2} \subset \mathbb{P}(1^{15}, 6, 9)$
61	6	1	$X_{12,12,2,2,2,2} \subset \mathbb{P}(1^{13}, 4^2, 6^2)$
62	6	1	$X_{30,5,3,2,2,2} \subset \mathbb{P}(1^{14}, 6, 10, 15)$
63	6	2	$X_{12,3,2,2,2,2} \subset \mathbb{P}(1^{15}, 4, 6)$
64	6	3	$X_{12,2,2,2,2,2} \subset \mathbb{P}(1^{15}, 4, 6)$
65	7	1	$X_{12,3,2,2,2,2,2} \subset \mathbb{P}(1^{16}, 4, 6)$
66	7	2	$X_{12,2,2,2,2,2,2} \subset \mathbb{P}(1^{16}, 4, 6)$
67	8	1	$X_{2,2,12,2,2,2,2,2} \subset \mathbb{P}(1^{17}, 4, 6)$

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