

APPENDIX: LAURENT POLYNOMIAL MIRRORS FOR 3-DIMENSIONAL FANO MANIFOLDS

This table exhibits Laurent polynomial mirrors for each of the 105 deformation families of 3-dimensional Fano manifolds. The “Method” column summarizes the method by which we computed the quantum period in each case: “quantum Lefschetz” means “quantum Lefschetz with Fano ambient space and no mirror map”; “quantum Lefschetz with weak Fano ambient” means “quantum Lefschetz with non-Fano but weak Fano ambient space”; “quantum Lefschetz with mirror map” means “quantum Lefschetz with non-trivial mirror map”; the other entries should be self-explanatory. The “Minkowski ID” column records the ID in the Graded Ring Database [CGK] of the corresponding Minkowski period sequence of manifold type; there are only 98 non-trivial entries in this column as only the 98 deformation families of 3-dimensional Fano manifolds with very ample anticanonical bundle give rise to Minkowski polynomial mirrors. There are in general many Minkowski polynomials (and infinitely many other Laurent polynomials) mirror to a given 3-dimensional Fano manifold, but we have listed only one such Laurent polynomial in each case.

Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds.

Name	Degree	Laurent polynomial	Method	Minkowski ID
V_2	2	$xy^6 + 6xy^5z + 6xy^5 + 15xy^4z^2 + 30xy^4z + 15xy^4 + 20xy^3z^3 + 60xy^3z^2 + 60xy^3z + 20xy^3 + 15xy^2z^4 + 60xy^2z^3 + 90xy^2z^2 + 60xy^2z + 15xy^2 + 6xy^2z^5 + 30xy^2z^4 + 60xy^2z^3 + 60xy^2z^2 + 30xyz + 6xy + xz^6 + 6xz^5 + 15xz^4 + 20xz^3 + 15xz^2 + 6xz + x + \frac{6y^2}{z} + 30y + \frac{30y}{z} + 60z + \frac{60}{z} + \frac{60z^2}{y} + \frac{180z}{y} + \frac{180}{y} + \frac{60}{yz} + \frac{30z^3}{y^2} + \frac{120z^2}{y^2} + \frac{180z}{y^2} + \frac{120}{y^2} + \frac{30}{y^2z} + \frac{6z^4}{y^3} + \frac{30z^3}{y^3} + \frac{60z^2}{y^3} + \frac{60z}{y^3} + \frac{30}{y^3} + \frac{6}{y^3z} + \frac{15}{y^3z^2} + \frac{60}{xy^3z} + \frac{60}{xy^3z^2} + \frac{90}{xy^4} + \frac{180}{xy^4z} + \frac{90}{xy^4z^2} + \frac{60z}{xy^5} + \frac{180}{xy^5} + \frac{180}{xy^5z} + \frac{60}{xy^5z^2} + \frac{15z^2}{xy^6} + \frac{60z}{xy^6} + \frac{90}{xy^6} + \frac{60}{xy^6z} + \frac{15}{xy^6z^2} + \frac{20}{x^2y^6z^3} + \frac{60}{x^2y^7z^2} + \frac{60}{x^2y^7z^3} + \frac{60}{x^2y^8z} + \frac{120}{x^2y^8z^2} + \frac{60}{x^2y^8z^3} + \frac{20}{x^2y^9} + \frac{60}{x^2y^9z} + \frac{60}{x^2y^9z^2} + \frac{20}{x^2y^9z^3} + \frac{15}{x^3y^{10}z^4} + \frac{30}{x^3y^{11}z^3} + \frac{30}{x^3y^{11}z^4} + \frac{15}{x^3y^{12}z^2} + \frac{30}{x^3y^{12}z^3} + \frac{15}{x^3y^{12}z^4} + \frac{6}{x^4y^{14}z^5} + \frac{6}{x^4y^{15}z^4} + \frac{6}{x^4y^{15}z^5} + \frac{1}{x^5y^{18}z^6}$	Weighted projective complete intersection	n/a
V_4	4	$xy^4 + 4xy^3z + 4xy^3 + 6xy^2z^2 + 12xy^2z + 6xy^2 + 4xyz^3 + 12xyz^2 + 12xyz + 4xy + xz^4 + 4xz^3 + 6xz^2 + 4xz + x + \frac{4y^2}{z} + 12y + \frac{12y}{z} + 12z + \frac{12}{z} + \frac{4z^2}{y} + \frac{12z}{y} + \frac{12}{yz} + \frac{4}{xz^2} + \frac{6}{xyz} + \frac{12}{xy^2} + \frac{6}{xy^2} + \frac{12}{xy^2z} + \frac{6}{xy^2z^2} + \frac{4}{x^2y^2z^3} + \frac{4}{x^2y^3z^2} + \frac{4}{x^2y^3z^3} + \frac{1}{x^3y^4z^4}$	Quantum Lefschetz	165

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
V_6	6	$xy^2z^3 + 3xy^2z^2 + 3xy^2z + xy^2 + 2xyz^3 + 6xyz^2 + 6xyz + 2xy + xz^3 + 3xz^2 + 3xz + x + 3yz + 6y + \frac{3y}{z} + 6z + \frac{6}{z} + \frac{3z}{y} + \frac{6}{y} + \frac{3}{yz} + \frac{3}{xz} + \frac{3}{xz^2} + \frac{6}{xyz} + \frac{6}{xyz^2} + \frac{3}{xy^2z} + \frac{3}{xy^2z^2} + \frac{1}{x^2yz^3} + \frac{2}{x^2y^2z^3} + \frac{1}{x^2y^3z^3}$	Quantum Lefschetz	164
V_8	8	$xy^2 + 2xyz^2 + 4xyz + 2xy + xz^4 + 4xz^3 + 6xz^2 + 4xz + x + \frac{4y}{z} + 4z + \frac{4}{z} + \frac{6}{xz^2} + \frac{2}{xy} + \frac{4}{xyz} + \frac{2}{xyz^2} + \frac{4}{x^2yz^3} + \frac{1}{x^3y^2z^4}$	Quantum Lefschetz	163
B_1	8	$xz^4 + 4xz^3 + 6xz^2 + 4xz + x + yz^4 + 4yz^3 + 6yz^2 + 4yz + y + \frac{2}{yz^2} + \frac{4}{yz^3} + \frac{2}{yz^4} + \frac{2}{xz^2} + \frac{4}{xz^3} + \frac{2}{xz^4} + \frac{1}{xy^2z^8} + \frac{1}{x^2yz^8}$	Weighted projective complete intersection	n/a
V_{10}	10	$xyz^3 + 3xyz^2 + 3xyz + xy + xz^2 + 2xz + x + yz^2 + 2yz + y + 3z + \frac{3}{z} + \frac{2}{y} + \frac{2}{yz} + \frac{2}{xz} + \frac{3}{xyz} + \frac{3}{xy^2z^2} + \frac{1}{xy^2z^2} + \frac{1}{x^2yz^2} + \frac{1}{x^2y^2z^3}$	Abelian/non-Abelian correspondence	160
V_{12}	12	$x^2y^3z + x^2y^2z + 2xy^2z + xy^2 + 2xyz + 2xy + x + yz + 3y + z + \frac{2}{y} + \frac{1}{x} + \frac{1}{xz} + \frac{2}{xy} + \frac{3}{xyz} + \frac{1}{xy^2} + \frac{3}{xy^2z} + \frac{1}{xy^3z}$	Abelian/non-Abelian correspondence	150
V_{14}	14	$xz + x + \frac{x}{yz} + yz^3 + 3yz^2 + 3yz + y + z + \frac{3}{z} + \frac{1}{yz} + \frac{3}{yz^2} + \frac{1}{y^2z^3} + \frac{z}{x} + \frac{1}{x} + \frac{1}{xyz}$	Abelian/non-Abelian correspondence	147
V_{16}	16	$x + \frac{2x}{yz} + \frac{x}{y^2z^2} + yz^2 + 2yz + y + 2z + \frac{2}{z} + \frac{1}{y} + \frac{2}{yz} + \frac{1}{yz^2} + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Abelian/non-Abelian correspondence	143
B_2	16	$xy^2 + 2xyz + 2xy + xz^2 + 2xz + x + \frac{2}{xz} + \frac{2}{xy} + \frac{2}{xyz} + \frac{1}{x^3y^2z^2}$	Weighted projective complete intersection	140
V_{18}	18	$xy^2 + 2xy + x + 2y + z + \frac{1}{z} + \frac{2}{y} + \frac{1}{yz} + \frac{1}{x} + \frac{2z}{xy} + \frac{1}{xy} + \frac{1}{xy^2} + \frac{z}{x^2y^2}$	Abelian/non-Abelian correspondence	124
V_{22}	22	$xy + \frac{xy}{z} + x + y + \frac{2y}{z} + z + \frac{2z}{y} + \frac{1}{y} + \frac{z}{y^2} + \frac{y}{xz} + \frac{1}{x}$	Abelian/non-Abelian correspondence	113
B_3	24	$x + \frac{x}{yz} + y + z + \frac{2}{z} + \frac{2}{y} + \frac{y}{xz} + \frac{2}{x} + \frac{z}{xy}$	Quantum Lefschetz	106
B_4	32	$x + yz^2 + 2yz + y + \frac{2}{yz} + \frac{1}{xy^2z^2}$	Quantum Lefschetz	75
B_5	40	$x + y + z + \frac{1}{z} + \frac{1}{y} + \frac{1}{x} + \frac{1}{xyz}$	Abelian/non-Abelian correspondence	46
Q^3	54	$x + y + z + \frac{1}{xz} + \frac{1}{xy}$	Quantum Lefschetz	3
\mathbb{P}^3	64	$x + y + z + \frac{1}{xyz}$	Toric variety	1

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
MM ₂₋₁	4	$x^7y^7z^{18} + 6x^6y^6z^{15} + 6x^5y^5z^{13} + 15x^5y^5z^{12} + 30x^4y^4z^{10} + 20x^4y^4z^9 +$ $x^4y^3z^9 + x^3y^4z^9 + 15x^3y^3z^8 + 60x^3y^3z^7 + 15x^3y^3z^6 + 3x^3y^2z^6 + 3x^2y^3z^6 +$ $60x^2y^2z^5 + 60x^2y^2z^4 + 6x^2y^2z^3 + 3x^2yz^4 + 3x^2yz^3 + 3xy^2z^4 + 3xy^2z^3 +$ $20xyz^3 + 90xyz^2 + 30xyz + xy + 6xz + x + 6yz + y + \frac{60}{z} + \frac{6}{z^2} + \frac{3}{yz} + \frac{3}{yz^2} +$ $\frac{3}{xz} + \frac{3}{xz^2} + \frac{15}{xyz^2} + \frac{60}{xyz^3} + \frac{15}{xyz^4} + \frac{3}{xy^2z^4} + \frac{3}{x^2yz^4} + \frac{30}{x^2y^2z^5} + \frac{20}{x^2y^2z^6} +$ $\frac{1}{x^2y^3z^6} + \frac{1}{x^3y^2z^6} + \frac{6}{x^3y^3z^7} + \frac{15}{x^3y^3z^8} + \frac{6}{x^4y^4z^{10}} + \frac{1}{x^5y^5z^{12}}$	Hypersurface in product	n/a
MM ₂₋₂	6	$xy^2 + 2xyz + 2xy + xz^2 + 2xz + x + \frac{y^2}{z} + 4y + \frac{4y}{z} + 6z + \frac{6}{z} + \frac{4z^2}{y} + \frac{14z}{y} +$ $\frac{14}{y} + \frac{4}{yz} + \frac{z^3}{y^2} + \frac{4z^2}{y^2} + \frac{6z}{y^2} + \frac{4}{y^2} + \frac{1}{y^2z} + \frac{4}{xz} + \frac{12}{xy} + \frac{12}{xyz} + \frac{12z}{xy^2} + \frac{25}{xy^2} +$ $\frac{12}{xy^2z} + \frac{4z^2}{xy^3} + \frac{12z}{xy^3} + \frac{12}{xy^3} + \frac{4}{xy^3z} + \frac{6}{x^2y^2z} + \frac{12}{x^2y^3} + \frac{12}{x^2y^3z} + \frac{6z}{x^2y^4} + \frac{12}{x^2y^4} +$ $\frac{6}{x^2y^4z} + \frac{4}{x^3y^4z} + \frac{4}{x^3y^5} + \frac{4}{x^3y^5z} + \frac{1}{x^4y^6z}$	Quantum Lefschetz with mirror map	n/a
MM ₂₋₃	8	$x^2y^5z^2 + 4x^2y^4z^2 + 6x^2y^3z^2 + 4x^2y^2z^2 + x^2yz^2 + xy^3z^2 + 4xy^3z + 2xy^2z^2 +$ $12xy^2z + xy^2 + xyz^2 + 12xyz + 2xy + 4xz + x + 2yz + 6y + 2z + \frac{2}{z} + \frac{6}{y} +$ $\frac{2}{yz} + \frac{1}{xy} + \frac{4}{xyz} + \frac{4}{xy^2z} + \frac{1}{xy^2z^2} + \frac{1}{x^2y^3z^2}$	Hypersurface in product	n/a
MM ₂₋₄	10	$xyz^3 + 3xyz^2 + 3xyz + xy + xz^2 + 2xz + x + yz^2 + 2yz + y + 4z + \frac{3}{z} +$ $\frac{2}{y} + \frac{2}{yz} + \frac{2}{x} + \frac{2}{xz} + \frac{4}{xyz} + \frac{3}{xyz^2} + \frac{1}{xy^2z^2} + \frac{1}{x^2yz^2} + \frac{1}{x^2y^2z^3}$	Quantum Lefschetz	161
MM ₂₋₅	12	$\frac{x^2}{yz} + x + \frac{3x}{z} + \frac{3x}{y} + \frac{x}{yz} + y + \frac{3y}{z} + z + \frac{2}{z} + \frac{3z}{y} + \frac{2}{y} + \frac{y^2}{xz} + \frac{3y}{x} + \frac{y}{xz} + \frac{3z}{x} + \frac{2}{x} + \frac{z^2}{xy} + \frac{z}{xy}$	Quantum Lefschetz	158
MM ₂₋₆	12	$x^2yz^2 + 2xyz^2 + 2xyz + 2xz + x + yz^2 + 2yz + y + 2z + \frac{2}{z} + \frac{1}{y} + \frac{2}{yz} + \frac{1}{x} +$ $\frac{2}{xz} + \frac{1}{xz^2} + \frac{2}{xyz} + \frac{2}{xy^2z} + \frac{1}{xy^2z^2}$	Quantum Lefschetz	149
MM ₂₋₇	14	$xy^3z^3 + xy^2z^3 + 3xy^2z^2 + xyz^2 + 3xyz + x + y^2z + yz + y + z + \frac{3}{yz} + \frac{1}{xz} +$ $\frac{2}{xyz} + \frac{3}{xy^2z^2} + \frac{1}{x^2y^3z^3}$	Quantum Lefschetz	148
MM ₂₋₈	14	$\frac{x^2}{y^2z} + x + \frac{x}{y} + \frac{2x}{yz} + \frac{x}{y^2} + yz + y + z + \frac{1}{z} + \frac{3}{y} + \frac{y^2z}{x} + \frac{2yz}{x} + \frac{y}{x} + \frac{3}{x} + \frac{y^2z}{x^2} + \frac{y}{x^2}$	Quantum Lefschetz with weak Fano ambient	144
MM ₂₋₉	16	$x + \frac{x}{z} + \frac{x}{yz} + \frac{x}{yz^2} + yz^2 + 2yz + y + 2z + \frac{2}{z} + \frac{1}{y} + \frac{1}{yz} + \frac{1}{yz^2} + \frac{yz}{x} + \frac{2}{x} + \frac{1}{xy^2z}$	Quantum Lefschetz	139

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
MM ₂₋₁₀	16	$xy^2 + 2xy + x + \frac{x}{z} + y^2z + 2yz + 2y + z + \frac{2}{y} + \frac{2}{yz} + \frac{1}{x} + \frac{2}{xy} + \frac{1}{xy^2} + \frac{1}{xy^2z}$	Quantum Lefschetz	145
MM ₂₋₁₁	18	$x + \frac{x}{z} + \frac{x}{y} + yz + y + z + \frac{2}{z} + \frac{2}{y} + \frac{yz}{x} + \frac{y}{x} + \frac{z}{x} + \frac{1}{x} + \frac{1}{xz} + \frac{1}{xy}$	Quantum Lefschetz	120
MM ₂₋₁₂	20	$\frac{x^2}{yz} + x + \frac{x}{y} + \frac{2x}{yz} + y + z + \frac{1}{y} + \frac{1}{yz} + \frac{2yz}{x} + \frac{y}{x} + \frac{1}{x} + \frac{y^2z}{x^2}$	Quantum Lefschetz	118
MM ₂₋₁₃	20	$xy + x + \frac{x}{z} + y + z + \frac{2}{z} + \frac{z}{y} + \frac{2}{y} + \frac{1}{yz} + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Quantum Lefschetz	119
MM ₂₋₁₄	20	$xy^2 + 2xy + x + 2y + z + \frac{2}{y} + \frac{1}{x} + \frac{z}{xy} + \frac{1}{xy} + \frac{1}{xyz} + \frac{1}{xy^2} + \frac{1}{xy^2z}$	Hypersurface in product	122
MM ₂₋₁₅	22	$x + \frac{x}{z} + \frac{x}{yz} + y + \frac{y}{z} + z + \frac{2}{z} + \frac{2}{y} + \frac{y}{xz} + \frac{2}{x} + \frac{z}{xy}$	Quantum Lefschetz	109
MM ₂₋₁₆	22	$xy + x + y + z + \frac{1}{z} + \frac{z}{y} + \frac{2}{y} + \frac{1}{yz} + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Quantum Lefschetz	104
MM ₂₋₁₇	24	$\frac{x^2}{yz} + \frac{x^2}{yz^2} + x + \frac{2x}{z} + \frac{x}{yz} + y + z + \frac{2z}{x} + \frac{1}{x} + \frac{z}{x^2}$	Abelian/non-Abelian correspondence	101
MM ₂₋₁₈	24	$x + \frac{x}{z} + \frac{x}{yz} + yz + y + z + \frac{1}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	74
MM ₂₋₁₉	26	$\frac{x^2}{yz} + x + \frac{2x}{yz} + y + z + \frac{1}{yz} + \frac{2yz}{x} + \frac{y}{x} + \frac{y^2z}{x^2}$	Quantum Lefschetz	86
MM ₂₋₂₀	26	$x + \frac{x}{y} + y + \frac{y}{z} + z + \frac{1}{z} + \frac{1}{y} + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Abelian/non-Abelian correspondence	87
MM ₂₋₂₁	28	$x + \frac{x}{yz} + y^2z + 2yz + y + z + \frac{2}{yz} + \frac{1}{xyz}$	Abelian/non-Abelian correspondence	84
MM ₂₋₂₂	30	$xy + x + \frac{x}{z} + y + z + \frac{1}{z} + \frac{1}{y} + \frac{1}{x} + \frac{z}{xy}$	Abelian/non-Abelian correspondence	69
MM ₂₋₂₃	30	$x^2y + 2xy + x + y + z + \frac{2}{xy} + \frac{1}{x^2y^2z}$	Quantum Lefschetz	78
MM ₂₋₂₄	30	$\frac{xy}{z} + x + \frac{x}{z} + y + z + \frac{z}{y} + \frac{1}{y} + \frac{y}{x} + \frac{1}{x}$	Quantum Lefschetz	44
MM ₂₋₂₅	32	$x + \frac{x}{z} + y + z + \frac{1}{y} + \frac{1}{yz} + \frac{yz}{x} + \frac{1}{x}$	Quantum Lefschetz	43
MM ₂₋₂₆	34	$xy + x + y + z + \frac{1}{z} + \frac{1}{y} + \frac{1}{x} + \frac{1}{xyz}$	Abelian/non-Abelian correspondence	58
MM ₂₋₂₇	38	$x + \frac{x}{z} + y + z + \frac{1}{yz} + \frac{1}{x} + \frac{1}{xy}$	Quantum Lefschetz	19
MM ₂₋₂₈	40	$xyz^2 + xyz + x + y + z + \frac{1}{yz} + \frac{1}{xz}$	Quantum Lefschetz	5

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
MM ₂₋₂₉	40	$x + \frac{x}{y} + y + z + \frac{2}{x} + \frac{1}{x^2 z}$	Quantum Lefschetz	35
MM ₂₋₃₀	46	$xyz + x + y + z + \frac{1}{xz} + \frac{1}{xy}$	Quantum Lefschetz	4
MM ₂₋₃₁	46	$x + \frac{x}{y} + y + z + \frac{1}{yz} + \frac{1}{x}$	Quantum Lefschetz	15
MM ₂₋₃₂	48	$x + y + z + \frac{1}{y} + \frac{1}{x} + \frac{1}{xyz}$	Quantum Lefschetz	24
MM ₂₋₃₃	54	$x + \frac{x}{z} + y + z + \frac{1}{xy}$	Toric variety	2
MM ₂₋₃₄	54	$x + y + z + \frac{1}{yz} + \frac{1}{x}$	Toric variety	10
MM ₂₋₃₅	56	$x + \frac{x}{yz} + y + z + \frac{1}{x}$	Toric variety	7
MM ₂₋₃₆	62	$\frac{x^2}{yz} + x + y + z + \frac{1}{x}$	Toric variety	6
MM ₃₋₁	12	$xy^2 + 2xyz + 2xy + xz^2 + 2xz + x + 2y + \frac{2y}{z} + 2z + \frac{2}{z} + \frac{2z}{y} + \frac{2}{y} + \frac{1}{x} + \frac{2}{xz} + \frac{1}{xz^2} + \frac{2}{xy} + \frac{2}{xyz} + \frac{1}{xy^2}$	Quantum Lefschetz with weak Fano ambient	154
MM ₃₋₂	14	$xyz^2 + xyz + 3xz + x + \frac{3x}{y} + \frac{x}{y^2 z} + 3yz + y + z + \frac{1}{y} + \frac{3}{yz} + \frac{3y}{x} + \frac{1}{x} + \frac{3}{xz} + \frac{y}{x^2 z}$	Quantum Lefschetz with mirror map	157
MM ₃₋₃	18	$x + \frac{2x}{y} + \frac{x}{yz} + \frac{x}{y^2} + yz + y + z + \frac{2}{z} + \frac{2}{y} + \frac{yz}{x} + \frac{2y}{x} + \frac{y}{xz} + \frac{1}{x}$	Quantum Lefschetz	135
MM ₃₋₄	18	$xyz + x + yz^2 + 2yz + y + 2z + \frac{2}{z} + \frac{1}{y} + \frac{2}{yz} + \frac{1}{yz^2} + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Quantum Lefschetz with weak Fano ambient	142
MM ₃₋₅	20	$xyz + xz^2 + 2xz + x + y + 2z + \frac{2}{z} + \frac{1}{y} + \frac{1}{yz} + \frac{1}{x} + \frac{2}{xz} + \frac{1}{xz^2}$	Quantum Lefschetz with mirror map	138
MM ₃₋₆	22	$\frac{x^2}{yz} + \frac{x^2}{y^2 z} + x + \frac{2x}{y} + \frac{x}{yz} + y + z + \frac{1}{y} + \frac{2y}{x} + \frac{2}{x} + \frac{y}{x^2}$	Quantum Lefschetz	117
MM ₃₋₇	24	$\frac{xy}{z} + x + \frac{x}{z} + \frac{x}{y} + y + z + \frac{2}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	103
MM ₃₋₈	24	$x + \frac{x}{z} + \frac{x}{y} + y + \frac{y}{z} + z + \frac{1}{z} + \frac{2}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	112
MM ₃₋₉	26	$\frac{x^2}{yz} + x + \frac{2x}{yz} + y + z + \frac{1}{yz} + \frac{y}{x} + \frac{z}{x} + \frac{1}{x}$	Quantum Lefschetz	22
MM ₃₋₁₀	26	$\frac{xy}{z} + x + \frac{x}{y} + y + z + \frac{2}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	99

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
MM ₃₋₁₁	28	$x + \frac{x}{z} + \frac{x}{yz} + y + z + \frac{1}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	72
MM ₃₋₁₂	28	$xz + x + y + \frac{y}{z} + z + \frac{1}{z} + \frac{z}{y} + \frac{1}{y} + \frac{y}{xz} + \frac{1}{x}$	Quantum Lefschetz	85
MM ₃₋₁₃	30	$xy + x + y + z + \frac{1}{z} + \frac{1}{y} + \frac{1}{yz} + \frac{z}{x} + \frac{1}{x}$	Quantum Lefschetz	70
MM ₃₋₁₄	32	$\frac{x^2}{yz} + x + \frac{x}{yz} + y + z + \frac{y}{x} + \frac{z}{x} + \frac{1}{x}$	Quantum Lefschetz with weak Fano ambient	21
MM ₃₋₁₅	32	$x + \frac{x}{yz} + y + z + \frac{1}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	67
MM ₃₋₁₆	34	$x + \frac{x}{y} + y + \frac{y}{z} + z + \frac{1}{y} + \frac{y}{xz} + \frac{1}{x}$	Quantum Lefschetz with weak Fano ambient	42
MM ₃₋₁₇	36	$x + y + \frac{y}{z} + z + \frac{1}{y} + \frac{y}{xz} + \frac{1}{x} + \frac{1}{xy}$	Quantum Lefschetz	39
MM ₃₋₁₈	36	$x + \frac{x}{y} + y + z + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Quantum Lefschetz	41
MM ₃₋₁₉	38	$xz + x + y + z + \frac{1}{yz} + \frac{1}{x} + \frac{1}{xyz}$	Quantum Lefschetz	18
MM ₃₋₂₀	38	$xy + x + y + z + \frac{1}{y} + \frac{1}{x} + \frac{1}{xyz}$	Quantum Lefschetz	38
MM ₃₋₂₁	38	$x + yz + y + z + \frac{1}{z} + \frac{1}{y} + \frac{yz}{x} + \frac{1}{x}$	Quantum Lefschetz	49
MM ₃₋₂₂	40	$xz + x + \frac{x}{yz} + y + z + \frac{1}{yz} + \frac{1}{x}$	Quantum Lefschetz	13
MM ₃₋₂₃	42	$xz + x + \frac{x}{y} + y + z + \frac{1}{yz} + \frac{1}{x}$	Quantum Lefschetz	17
MM ₃₋₂₄	42	$x + y + z + \frac{1}{y} + \frac{y}{x} + \frac{1}{x} + \frac{1}{xyz}$	Quantum Lefschetz	31
MM ₃₋₂₅	44	$x + \frac{x}{z} + y + z + \frac{1}{x} + \frac{1}{xy}$	Toric variety	16
MM ₃₋₂₆	46	$xy + x + y + z + \frac{1}{yz} + \frac{1}{x}$	Toric variety	12
MM ₃₋₂₇	48	$x + y + z + \frac{1}{z} + \frac{1}{y} + \frac{1}{x}$	Toric variety	45
MM ₃₋₂₈	48	$x + \frac{x}{z} + y + z + \frac{1}{y} + \frac{1}{x}$	Toric variety	28
MM ₃₋₂₉	50	$xy + x + \frac{x}{yz} + y + z + \frac{1}{x}$	Toric variety	8

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
MM ₃₋₃₀	50	$x + \frac{x}{y} + y + \frac{y}{z} + z + \frac{1}{x}$	Toric variety	11
MM ₃₋₃₁	52	$x + \frac{x}{z} + \frac{x}{y} + y + z + \frac{1}{x}$	Toric variety	14
MM ₄₋₁	24	$x^2z + 2xz + x + y + z + \frac{1}{y} + \frac{y}{xz} + \frac{1}{x} + \frac{2}{xz} + \frac{1}{xyz}$	Quantum Lefschetz	111
MM ₄₋₂	26	$x + \frac{x}{z} + \frac{x}{y} + y + z + \frac{1}{z} + \frac{2}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz with mirror map	110
MM ₄₋₃	28	$\frac{x^2}{y^2z} + x + \frac{2x}{y} + y + z + \frac{2y}{x} + \frac{1}{x} + \frac{y}{x^2}$	Quantum Lefschetz	88
MM ₄₋₄	30	$x + y + z + \frac{1}{z} + \frac{z}{y} + \frac{2}{y} + \frac{1}{yz} + \frac{y}{x} + \frac{1}{x}$	Quantum Lefschetz	83
MM ₄₋₅	32	$x + \frac{x}{z} + y + z + \frac{1}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz	68
MM ₄₋₆	32	$x + y + \frac{y}{z} + z + \frac{1}{z} + \frac{z}{y} + \frac{1}{y} + \frac{y}{x} + \frac{1}{x}$	Quantum Lefschetz with weak Fano ambient	81
MM ₄₋₇	34	$x + \frac{x}{y} + y + z + \frac{1}{y} + \frac{z}{x} + \frac{2}{x} + \frac{1}{xz}$	Quantum Lefschetz	65
MM ₄₋₈	36	$x + y + z + \frac{1}{z} + \frac{z}{y} + \frac{1}{y} + \frac{1}{x} + \frac{1}{xz}$	Quantum Lefschetz	57
MM ₄₋₉	38	$xy + x + y + z + \frac{1}{y} + \frac{2}{x} + \frac{1}{x^2z}$	Quantum Lefschetz	54
MM ₄₋₁₀	40	$xy + x + y + z + \frac{1}{y} + \frac{1}{yz} + \frac{1}{x}$	Toric variety	37
MM ₄₋₁₁	42	$xy + x + y + z + \frac{1}{z} + \frac{1}{y} + \frac{1}{x}$	Product	48
MM ₄₋₁₂	44	$xy + x + \frac{x}{z} + y + z + \frac{1}{y} + \frac{1}{x}$	Toric variety	34
MM ₄₋₁₃	46	$xy + \frac{xy}{z} + x + y + z + \frac{1}{y} + \frac{1}{x}$	Toric variety	29
MM ₅₋₁	28	$x + \frac{x}{z} + \frac{x}{y} + y + z + \frac{2}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Quantum Lefschetz with weak Fano ambient	100
MM ₅₋₂	36	$x + \frac{x}{z} + \frac{x}{y} + y + z + \frac{1}{y} + \frac{y}{x} + \frac{1}{x}$	Toric variety	64
MM ₅₋₃	36	$x + y + \frac{y}{z} + z + \frac{1}{z} + \frac{z}{y} + \frac{1}{y} + \frac{1}{x}$	Product	76

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Table 1: Mirror Laurent polynomials for 3-dimensional Fano manifolds – continued from previous page

Name	Degree	Laurent polynomial	Method	Minkowski ID
MM ₆₋₁	30	$x + \frac{x}{y} + y + z + \frac{1}{z} + \frac{2}{y} + \frac{y}{x} + \frac{2}{x} + \frac{1}{xy}$	Product	107
MM ₇₋₁	24	$x + yz^2 + 2yz + y + 2z + \frac{2}{z} + \frac{1}{y} + \frac{2}{yz} + \frac{1}{yz^2} + \frac{1}{x}$	Product	136
MM ₈₋₁	18	$x + yz^3 + 3yz^2 + 3yz + y + 3z + \frac{3}{z} + \frac{3}{yz} + \frac{3}{yz^2} + \frac{1}{yz^3} + \frac{1}{x}$	Product	155
MM ₉₋₁	12	$xz^4 + 4xz^3 + 6xz^2 + 4xz + x + y + 4z^2 + 12z + \frac{4}{z} + \frac{1}{y} + \frac{6}{x} + \frac{12}{xz} + \frac{6}{xz^2} + \frac{4}{x^2z^2} + \frac{4}{x^2z^3} + \frac{1}{x^3z^4}$	Product	n/a
MM ₁₀₋₁	6	$xz^6 + 6xz^5 + 15xz^4 + 20xz^3 + 15xz^2 + 6xz + x + y + 6z^3 + 30z^2 + 60z + \frac{30}{z} + \frac{6}{z^2} + \frac{1}{y} + \frac{15}{x} + \frac{60}{xz} + \frac{90}{xz^2} + \frac{60}{xz^3} + \frac{15}{xz^4} + \frac{20}{x^2z^3} + \frac{60}{x^2z^4} + \frac{60}{x^2z^5} + \frac{20}{x^2z^6} + \frac{15}{x^3z^6} + \frac{30}{x^3z^7} + \frac{15}{x^3z^8} + \frac{6}{x^4z^9} + \frac{6}{x^4z^{10}} + \frac{1}{x^5z^{12}}$	Product	n/a

REFERENCES

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