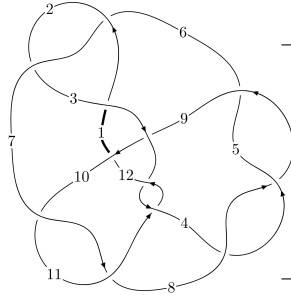
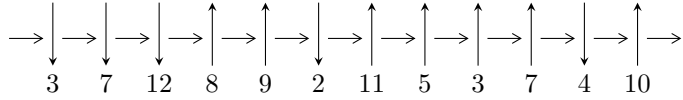


12n₀₆₀₇ (K12n₀₆₀₇)



A knot diagram¹

Linearized knot diagram



Solving Sequence

$$4,8 \xrightarrow{c_4} 5 \xrightarrow{c_8} 9,11 \xrightarrow{c_{11}} 12 \xrightarrow{c_3} 3 \xrightarrow{c_7} 7 \xrightarrow{c_2} 2 \xrightarrow{c_1} 1 \xrightarrow{c_6} 6 \xrightarrow{c_{10}} 10 \rightsquigarrow c_5, c_9, c_{12}$$

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -3.98483 \times 10^{51}u^{43} - 7.92706 \times 10^{51}u^{42} + \dots + 1.21780 \times 10^{52}b + 9.50729 \times 10^{52}, \\ - 6.39484 \times 10^{51}u^{43} - 5.55868 \times 10^{51}u^{42} + \dots + 3.53162 \times 10^{53}a + 2.88768 \times 10^{53}, \\ u^{44} + 3u^{43} + \dots - 36u - 29 \rangle$$

$$I_2^u = \langle u^{13} - u^{12} - 7u^{11} + 7u^{10} + 18u^9 - 18u^8 - 20u^7 + 18u^6 + 10u^5 - 2u^4 - 5u^3 - 4u^2 + b + 2u + 1, \\ - u^{14} + 2u^{13} + 7u^{12} - 16u^{11} - 17u^{10} + 50u^9 + 13u^8 - 74u^7 + 6u^6 + 50u^5 - 6u^4 - 12u^3 - 6u^2 + a + 5, \\ u^{15} - 2u^{14} - 7u^{13} + 16u^{12} + 17u^{11} - 50u^{10} - 13u^9 + 74u^8 - 6u^7 - 50u^6 + 6u^5 + 12u^4 + 6u^3 + u^2 - 5u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 59 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/maths/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\mathbf{I. } I_1^u = \langle -3.98 \times 10^{51} u^{43} - 7.93 \times 10^{51} u^{42} + \dots + 1.22 \times 10^{52} b + 9.51 \times 10^{52}, -6.39 \times 10^{51} u^{43} - 5.56 \times 10^{51} u^{42} + \dots + 3.53 \times 10^{53} a + 2.89 \times 10^{53}, u^{44} + 3u^{43} + \dots - 36u - 29 \rangle$$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0181074u^{43} + 0.0157397u^{42} + \dots - 7.01705u - 0.817663 \\ 0.327216u^{43} + 0.650933u^{42} + \dots - 4.17363u - 7.80693 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.309108u^{43} - 0.635193u^{42} + \dots - 2.84342u + 6.98927 \\ 0.327216u^{43} + 0.650933u^{42} + \dots - 4.17363u - 7.80693 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.518338u^{43} + 1.03102u^{42} + \dots - 15.2327u - 13.7592 \\ -0.303941u^{43} - 0.580963u^{42} + \dots + 5.51276u + 8.99431 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.549754u^{43} + 1.13751u^{42} + \dots - 14.1047u - 14.7839 \\ -0.193131u^{43} - 0.327791u^{42} + \dots + 2.95340u + 6.21753 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.232795u^{43} + 0.476323u^{42} + \dots + 3.84795u - 8.66991 \\ -0.371791u^{43} - 0.806245u^{42} + \dots + 1.40362u + 10.8222 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.350328u^{43} - 0.903767u^{42} + \dots + 29.3966u + 10.2617 \\ -0.431119u^{43} - 0.755303u^{42} + \dots - 1.45502u + 5.30649 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.00534609u^{43} - 0.0637310u^{42} + \dots - 3.23886u - 5.04605 \\ -0.0972752u^{43} - 0.0928284u^{42} + \dots - 4.57450u + 2.98741 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-0.277792u^{43} - 0.610725u^{42} + \dots + 9.19368u + 15.3613$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{44} + 54u^{43} + \dots + 157u + 1$
c_2, c_6	$u^{44} - 2u^{43} + \dots + 3u - 1$
c_3, c_{11}	$u^{44} - 3u^{43} + \dots - 25u + 1$
c_4, c_5, c_8	$u^{44} - 3u^{43} + \dots + 36u - 29$
c_7, c_{10}	$u^{44} - 4u^{43} + \dots + 2004u - 563$
c_9	$u^{44} - 2u^{43} + \dots + 2091u - 389$
c_{12}	$u^{44} + u^{43} + \dots + 1354u - 1081$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{44} - 114y^{43} + \dots - 6565y + 1$
c_2, c_6	$y^{44} - 54y^{43} + \dots - 157y + 1$
c_3, c_{11}	$y^{44} + 43y^{43} + \dots - 415y + 1$
c_4, c_5, c_8	$y^{44} - 43y^{43} + \dots + 154y + 841$
c_7, c_{10}	$y^{44} - 26y^{43} + \dots - 2861866y + 316969$
c_9	$y^{44} + 54y^{43} + \dots + 12410735y + 151321$
c_{12}	$y^{44} + 49y^{43} + \dots + 24190678y + 1168561$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.232314 + 0.891394I$ $a = -1.182840 + 0.641241I$ $b = -0.785573 + 0.181213I$	$-9.31236 + 3.20269I$	$-1.63968 - 3.08905I$
$u = 0.232314 - 0.891394I$ $a = -1.182840 - 0.641241I$ $b = -0.785573 - 0.181213I$	$-9.31236 - 3.20269I$	$-1.63968 + 3.08905I$
$u = -0.421682 + 0.772572I$ $a = -0.86640 - 1.32108I$ $b = 0.027933 - 1.313490I$	$4.97162 + 0.16549I$	$5.68850 + 0.34807I$
$u = -0.421682 - 0.772572I$ $a = -0.86640 + 1.32108I$ $b = 0.027933 + 1.313490I$	$4.97162 - 0.16549I$	$5.68850 - 0.34807I$
$u = -0.837269 + 0.017279I$ $a = -0.688236 - 0.510031I$ $b = 0.052866 + 0.391971I$	$1.359070 + 0.099848I$	$6.44713 + 0.44768I$
$u = -0.837269 - 0.017279I$ $a = -0.688236 + 0.510031I$ $b = 0.052866 - 0.391971I$	$1.359070 - 0.099848I$	$6.44713 - 0.44768I$
$u = -1.16381$ $a = 1.26734$ $b = 0.816752$	2.85076	2.72130
$u = -1.187230 + 0.325824I$ $a = 1.367400 + 0.224408I$ $b = 0.332131 + 1.373840I$	$7.30043 - 4.16721I$	$6.35771 + 3.21063I$
$u = -1.187230 - 0.325824I$ $a = 1.367400 - 0.224408I$ $b = 0.332131 - 1.373840I$	$7.30043 + 4.16721I$	$6.35771 - 3.21063I$
$u = 1.229270 + 0.131786I$ $a = 0.802568 + 0.161525I$ $b = 0.892070 - 0.665689I$	$2.18790 + 3.06008I$	$7.00945 - 4.71003I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.229270 - 0.131786I$ $a = 0.802568 - 0.161525I$ $b = 0.892070 + 0.665689I$	$2.18790 - 3.06008I$	$7.00945 + 4.71003I$
$u = -0.132670 + 0.748244I$ $a = 0.413490 + 1.238040I$ $b = 0.14531 + 1.46229I$	$4.65271 - 3.21249I$	$2.19622 + 5.43824I$
$u = -0.132670 - 0.748244I$ $a = 0.413490 - 1.238040I$ $b = 0.14531 - 1.46229I$	$4.65271 + 3.21249I$	$2.19622 - 5.43824I$
$u = 0.413623 + 1.194950I$ $a = -0.734599 + 0.755593I$ $b = -0.29763 + 1.39048I$	$-4.29060 + 7.07615I$	$2.00000 - 4.71324I$
$u = 0.413623 - 1.194950I$ $a = -0.734599 - 0.755593I$ $b = -0.29763 - 1.39048I$	$-4.29060 - 7.07615I$	$2.00000 + 4.71324I$
$u = 1.150740 + 0.556416I$ $a = 0.032760 - 0.925047I$ $b = -0.328510 - 0.006839I$	$-6.59118 + 1.93121I$	0
$u = 1.150740 - 0.556416I$ $a = 0.032760 + 0.925047I$ $b = -0.328510 + 0.006839I$	$-6.59118 - 1.93121I$	0
$u = -1.303890 + 0.194858I$ $a = -0.855836 + 0.581357I$ $b = -0.03406 - 1.56374I$	$8.41843 - 0.01026I$	0
$u = -1.303890 - 0.194858I$ $a = -0.855836 - 0.581357I$ $b = -0.03406 + 1.56374I$	$8.41843 + 0.01026I$	0
$u = 1.355820 + 0.181971I$ $a = 0.18635 - 1.43687I$ $b = -0.110848 + 1.367110I$	$-2.05757 + 3.46602I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.355820 - 0.181971I$ $a = 0.18635 + 1.43687I$ $b = -0.110848 - 1.367110I$	$-2.05757 - 3.46602I$	0
$u = -1.363940 + 0.224481I$ $a = -0.752199 - 0.014028I$ $b = -0.777456 + 1.110380I$	$-1.75499 - 1.31745I$	0
$u = -1.363940 - 0.224481I$ $a = -0.752199 + 0.014028I$ $b = -0.777456 - 1.110380I$	$-1.75499 + 1.31745I$	0
$u = 1.41075 + 0.33605I$ $a = 1.010620 + 0.344192I$ $b = 0.26866 - 1.59656I$	$9.67423 + 7.25773I$	0
$u = 1.41075 - 0.33605I$ $a = 1.010620 - 0.344192I$ $b = 0.26866 + 1.59656I$	$9.67423 - 7.25773I$	0
$u = 0.532070 + 0.131930I$ $a = 0.546352 + 0.863213I$ $b = 0.339438 - 0.970682I$	$0.83167 + 2.36657I$	$-0.87472 - 6.65650I$
$u = 0.532070 - 0.131930I$ $a = 0.546352 - 0.863213I$ $b = 0.339438 + 0.970682I$	$0.83167 - 2.36657I$	$-0.87472 + 6.65650I$
$u = -1.43896 + 0.36287I$ $a = -0.916232 + 0.157045I$ $b = -1.063760 - 0.354092I$	$-3.95592 - 7.70748I$	0
$u = -1.43896 - 0.36287I$ $a = -0.916232 - 0.157045I$ $b = -1.063760 + 0.354092I$	$-3.95592 + 7.70748I$	0
$u = 1.16519 + 0.93278I$ $a = 0.430958 - 0.453922I$ $b = -0.130936 - 1.336900I$	$-2.17172 + 0.20438I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.16519 - 0.93278I$ $a = 0.430958 + 0.453922I$ $b = -0.130936 + 1.336900I$	$-2.17172 - 0.20438I$	0
$u = 1.50599$ $a = -0.890789$ $b = -0.701130$	7.41930	0
$u = -1.51357$ $a = 0.442367$ $b = 0.615094$	4.10092	0
$u = 0.093435 + 0.449887I$ $a = 0.704295 + 0.829058I$ $b = 0.537602 + 0.282669I$	$-1.096590 - 0.866114I$	$-3.90601 + 3.40711I$
$u = 0.093435 - 0.449887I$ $a = 0.704295 - 0.829058I$ $b = 0.537602 - 0.282669I$	$-1.096590 + 0.866114I$	$-3.90601 - 3.40711I$
$u = 0.044561 + 0.449061I$ $a = -2.51002 + 1.22441I$ $b = -0.445864 - 1.148650I$	$-6.42558 - 1.22817I$	$1.23064 + 0.76065I$
$u = 0.044561 - 0.449061I$ $a = -2.51002 - 1.22441I$ $b = -0.445864 + 1.148650I$	$-6.42558 + 1.22817I$	$1.23064 - 0.76065I$
$u = -0.437583$ $a = -1.73381$ $b = -0.0495045$	0.995678	12.7470
$u = 1.58442 + 0.22351I$ $a = -0.988026 - 0.209610I$ $b = -0.273784 + 1.367010I$	$11.87800 + 3.53758I$	0
$u = 1.58442 - 0.22351I$ $a = -0.988026 + 0.209610I$ $b = -0.273784 - 1.367010I$	$11.87800 - 3.53758I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.57334 + 0.45526I$	$2.06161 - 12.99220I$	0
$a = -1.096720 + 0.211977I$		
$b = -0.40918 - 1.51901I$		
$u = -1.57334 - 0.45526I$	$2.06161 + 12.99220I$	0
$a = -1.096720 - 0.211977I$		
$b = -0.40918 + 1.51901I$		
$u = -1.64873 + 0.07955I$	$8.71374 - 3.02881I$	0
$a = 0.484789 - 0.551045I$		
$b = 0.220970 + 1.380770I$		
$u = -1.64873 - 0.07955I$	$8.71374 + 3.02881I$	0
$a = 0.484789 + 0.551045I$		
$b = 0.220970 - 1.380770I$		

II.

$$I_2^u = \langle u^{13} - u^{12} + \dots + b + 1, -u^{14} + 2u^{13} + \dots + a + 5, u^{15} - 2u^{14} + \dots - 5u - 1 \rangle$$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^{14} - 2u^{13} + \dots + 6u^2 - 5 \\ -u^{13} + u^{12} + \dots - 2u - 1 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u^{14} - u^{13} + \dots + 2u - 4 \\ -u^{13} + u^{12} + \dots - 2u - 1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u^{11} - 7u^9 + u^8 + 18u^7 - 5u^6 - 20u^5 + 7u^4 + 8u^3 - u^2 - 1 \\ -u^{13} + u^{12} + \dots - 4u - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^{14} + 2u^{13} + \dots + u + 5 \\ -u^{14} + u^{13} + \dots - 4u^2 - 2u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} u^{14} - 2u^{13} + \dots + 4u - 4 \\ u^{14} - 2u^{13} + \dots + 3u^2 + 3u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 2u^{14} - 2u^{13} + \dots + 6u - 3 \\ u^{14} - 2u^{13} + \dots + 7u^2 + 3u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^5 - 3u^3 + 2u \\ -u^{13} + u^{12} + \dots + 4u^2 + 2u \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $2u^{14} - 5u^{13} - 13u^{12} + 39u^{11} + 26u^{10} - 118u^9 - 2u^8 + 166u^7 - 44u^6 - 101u^5 + 29u^4 + 17u^3 + 10u^2 + 2u - 4$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{15} - 17u^{14} + \dots - 10u - 1$
c_2	$u^{15} - u^{14} + \dots - 5u^2 - 1$
c_3	$u^{15} + 2u^{14} + \dots + 2u - 1$
c_4, c_5	$u^{15} - 2u^{14} + \dots - 5u - 1$
c_6	$u^{15} + u^{14} + \dots + 5u^2 + 1$
c_7	$u^{15} - 3u^{14} + \dots + 5u + 1$
c_8	$u^{15} + 2u^{14} + \dots - 5u + 1$
c_9	$u^{15} - u^{14} + \dots - 4u - 1$
c_{10}	$u^{15} + 3u^{14} + \dots + 5u - 1$
c_{11}	$u^{15} - 2u^{14} + \dots + 2u + 1$
c_{12}	$u^{15} + 3u^{13} + \dots - u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{15} - 25y^{14} + \dots + 166y - 1$
c_2, c_6	$y^{15} - 17y^{14} + \dots - 10y - 1$
c_3, c_{11}	$y^{15} + 16y^{14} + \dots + 28y - 1$
c_4, c_5, c_8	$y^{15} - 18y^{14} + \dots + 27y - 1$
c_7, c_{10}	$y^{15} - 9y^{14} + \dots + 11y - 1$
c_9	$y^{15} + 7y^{14} + \dots + 38y - 1$
c_{12}	$y^{15} + 6y^{14} + \dots + 7y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.934249 + 0.468327I$ $a = -0.078829 - 0.897138I$ $b = 0.285799 - 0.922611I$	$-5.20797 + 2.96284I$	$4.54487 - 3.34260I$
$u = 0.934249 - 0.468327I$ $a = -0.078829 + 0.897138I$ $b = 0.285799 + 0.922611I$	$-5.20797 - 2.96284I$	$4.54487 + 3.34260I$
$u = -0.869322 + 0.091277I$ $a = -0.268456 - 0.210742I$ $b = -0.457860 + 0.901308I$	$1.38423 + 1.85573I$	$6.45379 - 0.08829I$
$u = -0.869322 - 0.091277I$ $a = -0.268456 + 0.210742I$ $b = -0.457860 - 0.901308I$	$1.38423 - 1.85573I$	$6.45379 + 0.08829I$
$u = 1.104070 + 0.476456I$ $a = -0.340525 - 0.805960I$ $b = 0.292941 + 1.082610I$	$-4.60809 + 0.68620I$	$3.07033 - 0.28009I$
$u = 1.104070 - 0.476456I$ $a = -0.340525 + 0.805960I$ $b = 0.292941 - 1.082610I$	$-4.60809 - 0.68620I$	$3.07033 + 0.28009I$
$u = -0.143480 + 0.548716I$ $a = -0.30256 - 2.25452I$ $b = -0.16552 - 1.42393I$	$5.28846 - 2.33485I$	$6.06895 + 0.77612I$
$u = -0.143480 - 0.548716I$ $a = -0.30256 + 2.25452I$ $b = -0.16552 + 1.42393I$	$5.28846 + 2.33485I$	$6.06895 - 0.77612I$
$u = -1.45684$ $a = 0.770423$ $b = 0.184352$	5.01004	8.46440
$u = 1.52546$ $a = -0.869923$ $b = -0.935208$	6.67613	2.28060

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.51915 + 0.26492I$ $a = 0.880313 - 0.376323I$ $b = 0.05993 + 1.45415I$	$10.22370 - 0.90460I$	$8.60899 + 0.29397I$
$u = -1.51915 - 0.26492I$ $a = 0.880313 + 0.376323I$ $b = 0.05993 - 1.45415I$	$10.22370 + 0.90460I$	$8.60899 - 0.29397I$
$u = 1.55868 + 0.15458I$ $a = -0.923357 - 0.217594I$ $b = -0.40039 + 1.46959I$	$11.52840 + 4.89291I$	$7.41262 - 4.45672I$
$u = 1.55868 - 0.15458I$ $a = -0.923357 + 0.217594I$ $b = -0.40039 - 1.46959I$	$11.52840 - 4.89291I$	$7.41262 + 4.45672I$
$u = -0.198713$ $a = -4.83367$ $b = -0.478944$	0.444342	-4.06410

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{15} - 17u^{14} + \dots - 10u - 1)(u^{44} + 54u^{43} + \dots + 157u + 1)$
c_2	$(u^{15} - u^{14} + \dots - 5u^2 - 1)(u^{44} - 2u^{43} + \dots + 3u - 1)$
c_3	$(u^{15} + 2u^{14} + \dots + 2u - 1)(u^{44} - 3u^{43} + \dots - 25u + 1)$
c_4, c_5	$(u^{15} - 2u^{14} + \dots - 5u - 1)(u^{44} - 3u^{43} + \dots + 36u - 29)$
c_6	$(u^{15} + u^{14} + \dots + 5u^2 + 1)(u^{44} - 2u^{43} + \dots + 3u - 1)$
c_7	$(u^{15} - 3u^{14} + \dots + 5u + 1)(u^{44} - 4u^{43} + \dots + 2004u - 563)$
c_8	$(u^{15} + 2u^{14} + \dots - 5u + 1)(u^{44} - 3u^{43} + \dots + 36u - 29)$
c_9	$(u^{15} - u^{14} + \dots - 4u - 1)(u^{44} - 2u^{43} + \dots + 2091u - 389)$
c_{10}	$(u^{15} + 3u^{14} + \dots + 5u - 1)(u^{44} - 4u^{43} + \dots + 2004u - 563)$
c_{11}	$(u^{15} - 2u^{14} + \dots + 2u + 1)(u^{44} - 3u^{43} + \dots - 25u + 1)$
c_{12}	$(u^{15} + 3u^{13} + \dots - u - 1)(u^{44} + u^{43} + \dots + 1354u - 1081)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{15} - 25y^{14} + \dots + 166y - 1)(y^{44} - 114y^{43} + \dots - 6565y + 1)$
c_2, c_6	$(y^{15} - 17y^{14} + \dots - 10y - 1)(y^{44} - 54y^{43} + \dots - 157y + 1)$
c_3, c_{11}	$(y^{15} + 16y^{14} + \dots + 28y - 1)(y^{44} + 43y^{43} + \dots - 415y + 1)$
c_4, c_5, c_8	$(y^{15} - 18y^{14} + \dots + 27y - 1)(y^{44} - 43y^{43} + \dots + 154y + 841)$
c_7, c_{10}	$(y^{15} - 9y^{14} + \dots + 11y - 1)(y^{44} - 26y^{43} + \dots - 2861866y + 316969)$
c_9	$(y^{15} + 7y^{14} + \dots + 38y - 1)$ $\cdot (y^{44} + 54y^{43} + \dots + 12410735y + 151321)$
c_{12}	$(y^{15} + 6y^{14} + \dots + 7y - 1)$ $\cdot (y^{44} + 49y^{43} + \dots + 24190678y + 1168561)$