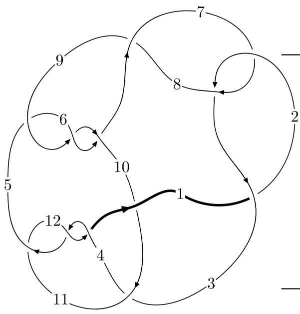
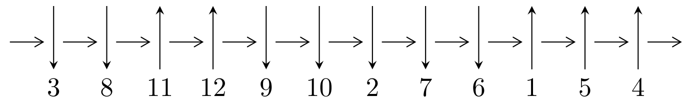
$12a_{0790}$ $(K12a_{0790})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

Ideals for irreducible components[2] of $X_{\mathbf{par}}$

$$I_1^u = \langle -u^{73} + 3u^{72} + \cdots + 4b - 1,\ -u^{73} + 3u^{72} + \cdots + 4a + 3,\ u^{74} - 4u^{73} + \cdots + u - 1 \rangle$$
$$I_2^u = \langle b - a - 1,\ a^3 + 2a^2 + 3a + 1,\ u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 77 representations.

[1]The 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`).

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

I.

$$I_1^u = \langle -u^{73}+3u^{72}+\cdots+4b-1,\ -u^{73}+3u^{72}+\cdots+4a+3,\ u^{74}-4u^{73}+\cdots+u-1\rangle$$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -u \\ -u^3+u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^2+1 \\ -u^4+2u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} \frac{1}{4}u^{73}-\frac{3}{4}u^{72}+\cdots-6u-\frac{3}{4} \\ \frac{1}{4}u^{73}-\frac{3}{4}u^{72}+\cdots-\frac{15}{4}u^2+\frac{1}{4} \end{pmatrix}$$

$$a_4 = \begin{pmatrix} \frac{17}{4}u^{73}-\frac{49}{4}u^{72}+\cdots-\frac{1}{2}u+\frac{19}{4} \\ 5u^{73}-\frac{29}{2}u^{72}+\cdots-\frac{1}{2}u+\frac{9}{2} \end{pmatrix}$$

$$a_1 = \begin{pmatrix} \frac{21}{2}u^{73}-\frac{57}{2}u^{72}+\cdots-7u+\frac{15}{2} \\ \frac{77}{4}u^{73}-\frac{213}{4}u^{72}+\cdots-\frac{5}{2}u+\frac{63}{4} \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^5-2u^3+u \\ u^7-3u^5+2u^3+u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u^{18}+7u^{16}+\cdots-6u-1 \\ \frac{1}{4}u^{73}-\frac{3}{4}u^{72}+\cdots-\frac{15}{4}u^2+\frac{1}{4} \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -\frac{25}{2}u^{73}+\frac{67}{2}u^{72}+\cdots-2u-\frac{19}{2} \\ \frac{59}{4}u^{73}-\frac{163}{4}u^{72}+\cdots-\frac{5}{2}u+\frac{49}{4} \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -\frac{1}{2}u^{73}+\frac{5}{2}u^{72}+\cdots-5u-\frac{3}{2} \\ \frac{117}{4}u^{73}-\frac{325}{4}u^{72}+\cdots-\frac{9}{2}u+\frac{95}{4} \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 63u^{73}-\frac{343}{2}u^{72}+\cdots-\frac{3}{2}u+\frac{101}{2}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_8	$u^{74} + 21u^{73} + \cdots + 848u + 64$
c_2, c_7	$u^{74} + u^{73} + \cdots + 12u + 8$
c_3	$u^{74} - 2u^{73} + \cdots - 60u - 9$
c_4, c_{11}, c_{12}	$u^{74} + 2u^{73} + \cdots - 6u - 1$
c_5, c_6, c_9	$u^{74} - 4u^{73} + \cdots + u - 1$
c_{10}	$u^{74} + 18u^{73} + \cdots + 560u + 49$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_8	$y^{74} + 59y^{73} + \cdots - 36096y + 4096$
c_2, c_7	$y^{74} - 21y^{73} + \cdots - 848y + 64$
c_3	$y^{74} - 6y^{73} + \cdots + 162y + 81$
c_4, c_{11}, c_{12}	$y^{74} + 66y^{73} + \cdots - 14y + 1$
c_5, c_6, c_9	$y^{74} - 60y^{73} + \cdots + 17y + 1$
c_{10}	$y^{74} + 6y^{73} + \cdots + 49882y + 2401$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.982931 + 0.351670I$ $a = 1.29013 - 1.44788I$ $b = -0.114226 - 1.346610I$	$-5.40881 + 1.48488I$	0
$u = -0.982931 - 0.351670I$ $a = 1.29013 + 1.44788I$ $b = -0.114226 + 1.346610I$	$-5.40881 - 1.48488I$	0
$u = -0.114338 + 0.877618I$ $a = 1.79001 - 0.30234I$ $b = -0.29499 - 1.39816I$	$0.40081 + 10.70940I$	0
$u = -0.114338 - 0.877618I$ $a = 1.79001 + 0.30234I$ $b = -0.29499 + 1.39816I$	$0.40081 - 10.70940I$	0
$u = -0.096801 + 0.866328I$ $a = 1.151770 - 0.473352I$ $b = -0.736562 - 0.242206I$	$5.61875 + 6.96802I$	$0. - 6.74295I$
$u = -0.096801 - 0.866328I$ $a = 1.151770 + 0.473352I$ $b = -0.736562 + 0.242206I$	$5.61875 - 6.96802I$	$0. + 6.74295I$
$u = -0.841922$ $a = 0.589364$ $b = -0.325299$	-1.16434	-11.0700
$u = -0.071633 + 0.837460I$ $a = 0.325108 - 0.396010I$ $b = -0.289957 + 0.808580I$	$3.72265 + 3.07550I$	$0. - 1.96212I$
$u = -0.071633 - 0.837460I$ $a = 0.325108 + 0.396010I$ $b = -0.289957 - 0.808580I$	$3.72265 - 3.07550I$	$0. + 1.96212I$
$u = -0.032962 + 0.823375I$ $a = -0.347239 - 0.544285I$ $b = 0.256055 + 0.912970I$	$3.87638 + 2.84826I$	$0. - 3.67608I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.032962 - 0.823375I$ $a = -0.347239 + 0.544285I$ $b = 0.256055 - 0.912970I$	$3.87638 - 2.84826I$	$0. + 3.67608I$
$u = 0.011012 + 0.810021I$ $a = -1.250280 - 0.486422I$ $b = 0.733701 - 0.206836I$	$6.08567 - 0.95765I$	$3.69454 + 1.25612I$
$u = 0.011012 - 0.810021I$ $a = -1.250280 + 0.486422I$ $b = 0.733701 + 0.206836I$	$6.08567 + 0.95765I$	$3.69454 - 1.25612I$
$u = 0.038683 + 0.799560I$ $a = -1.97178 - 0.13620I$ $b = 0.294669 - 1.379250I$	$1.05738 - 4.68103I$	$-0.94722 + 2.51196I$
$u = 0.038683 - 0.799560I$ $a = -1.97178 + 0.13620I$ $b = 0.294669 + 1.379250I$	$1.05738 + 4.68103I$	$-0.94722 - 2.51196I$
$u = -0.623280 + 0.490874I$ $a = -0.097681 + 1.280110I$ $b = -0.185972 + 1.388820I$	$-6.53161 - 2.00010I$	$-10.45886 + 0.I$
$u = -0.623280 - 0.490874I$ $a = -0.097681 - 1.280110I$ $b = -0.185972 - 1.388820I$	$-6.53161 + 2.00010I$	$-10.45886 + 0.I$
$u = -0.138267 + 0.766818I$ $a = -0.172017 + 0.580214I$ $b = -0.051081 + 1.397250I$	$-2.82199 + 2.49718I$	$-4.67442 - 3.51648I$
$u = -0.138267 - 0.766818I$ $a = -0.172017 - 0.580214I$ $b = -0.051081 - 1.397250I$	$-2.82199 - 2.49718I$	$-4.67442 + 3.51648I$
$u = 1.229430 + 0.060313I$ $a = -0.812751 - 0.979382I$ $b = 0.261875 - 1.235300I$	$-5.67724 - 3.54075I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.229430 - 0.060313I$ $a = -0.812751 + 0.979382I$ $b = 0.261875 + 1.235300I$	$-5.67724 + 3.54075I$	0
$u = 1.23207$ $a = -0.416426$ $b = 0.710023$	-1.89563	0
$u = -1.156710 + 0.449194I$ $a = 0.368328 + 1.040150I$ $b = -0.28561 + 1.38677I$	$-2.79362 - 5.97206I$	0
$u = -1.156710 - 0.449194I$ $a = 0.368328 - 1.040150I$ $b = -0.28561 - 1.38677I$	$-2.79362 + 5.97206I$	0
$u = -0.447414 + 0.610883I$ $a = 1.87368 - 1.20772I$ $b = -0.22452 - 1.39679I$	$-5.97032 + 6.07295I$	$-8.10796 - 7.73862I$
$u = -0.447414 - 0.610883I$ $a = 1.87368 + 1.20772I$ $b = -0.22452 + 1.39679I$	$-5.97032 - 6.07295I$	$-8.10796 + 7.73862I$
$u = -1.174400 + 0.427018I$ $a = 0.406561 - 0.005470I$ $b = -0.716781 + 0.220171I$	$2.31230 - 2.33683I$	0
$u = -1.174400 - 0.427018I$ $a = 0.406561 + 0.005470I$ $b = -0.716781 - 0.220171I$	$2.31230 + 2.33683I$	0
$u = -1.250100 + 0.050558I$ $a = 0.58611 + 1.34682I$ $b = 0.502125 + 0.290673I$	$-2.76802 + 1.42671I$	0
$u = -1.250100 - 0.050558I$ $a = 0.58611 - 1.34682I$ $b = 0.502125 - 0.290673I$	$-2.76802 - 1.42671I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.207660 + 0.387161I$ $a = 0.908549 - 0.496550I$ $b = -0.200242 - 0.878527I$	$0.234639 + 1.326060I$	0
$u = -1.207660 - 0.387161I$ $a = 0.908549 + 0.496550I$ $b = -0.200242 + 0.878527I$	$0.234639 - 1.326060I$	0
$u = -1.249840 + 0.252900I$ $a = 1.62462 - 2.52638I$ $b = 0.080915 - 1.377220I$	$-5.96096 + 0.85034I$	0
$u = -1.249840 - 0.252900I$ $a = 1.62462 + 2.52638I$ $b = 0.080915 + 1.377220I$	$-5.96096 - 0.85034I$	0
$u = 1.237920 + 0.345248I$ $a = -0.454616 + 1.014780I$ $b = 0.303590 + 1.360390I$	$-2.63807 + 0.55572I$	0
$u = 1.237920 - 0.345248I$ $a = -0.454616 - 1.014780I$ $b = 0.303590 - 1.360390I$	$-2.63807 - 0.55572I$	0
$u = -1.234510 + 0.365040I$ $a = 0.701470 - 0.198406I$ $b = 0.225501 - 0.802739I$	$0.16896 + 1.43086I$	0
$u = -1.234510 - 0.365040I$ $a = 0.701470 + 0.198406I$ $b = 0.225501 + 0.802739I$	$0.16896 - 1.43086I$	0
$u = -1.307020 + 0.054439I$ $a = -1.03660 + 4.23394I$ $b = 0.206167 + 1.397270I$	$-8.12854 + 4.09193I$	0
$u = -1.307020 - 0.054439I$ $a = -1.03660 - 4.23394I$ $b = 0.206167 - 1.397270I$	$-8.12854 - 4.09193I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.260470 + 0.357448I$ $a = -0.411022 - 0.003429I$ $b = 0.747744 + 0.176905I$	$2.21416 - 3.24351I$	0
$u = 1.260470 - 0.357448I$ $a = -0.411022 + 0.003429I$ $b = 0.747744 - 0.176905I$	$2.21416 + 3.24351I$	0
$u = -1.277440 + 0.359296I$ $a = -0.58395 + 1.32299I$ $b = 0.721895 + 0.236951I$	$2.07943 + 5.16591I$	0
$u = -1.277440 - 0.359296I$ $a = -0.58395 - 1.32299I$ $b = 0.721895 - 0.236951I$	$2.07943 - 5.16591I$	0
$u = -0.394203 + 0.545208I$ $a = 0.829429 - 0.695537I$ $b = -0.569066 - 0.273917I$	$-0.65164 + 3.14368I$	$-3.24051 - 8.93750I$
$u = -0.394203 - 0.545208I$ $a = 0.829429 + 0.695537I$ $b = -0.569066 + 0.273917I$	$-0.65164 - 3.14368I$	$-3.24051 + 8.93750I$
$u = 1.290360 + 0.368627I$ $a = -0.878129 - 0.593703I$ $b = 0.286921 - 0.976043I$	$-0.24573 - 7.13569I$	0
$u = 1.290360 - 0.368627I$ $a = -0.878129 + 0.593703I$ $b = 0.286921 + 0.976043I$	$-0.24573 + 7.13569I$	0
$u = -1.296910 + 0.352312I$ $a = -2.56859 + 2.04684I$ $b = 0.28811 + 1.39495I$	$-3.11175 + 8.83167I$	0
$u = -1.296910 - 0.352312I$ $a = -2.56859 - 2.04684I$ $b = 0.28811 - 1.39495I$	$-3.11175 - 8.83167I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.365930 + 0.104815I$ $a = -0.439263 - 0.721972I$ $b = -0.463262 - 0.494084I$	$-6.91013 - 1.79711I$	0
$u = 1.365930 - 0.104815I$ $a = -0.439263 + 0.721972I$ $b = -0.463262 + 0.494084I$	$-6.91013 + 1.79711I$	0
$u = 1.322090 + 0.373208I$ $a = -0.504347 - 0.222253I$ $b = -0.351613 - 0.778711I$	$-0.64388 - 7.42880I$	0
$u = 1.322090 - 0.373208I$ $a = -0.504347 + 0.222253I$ $b = -0.351613 + 0.778711I$	$-0.64388 + 7.42880I$	0
$u = 1.343220 + 0.336289I$ $a = -1.02775 - 2.21581I$ $b = -0.05949 - 1.43435I$	$-7.46754 - 6.50190I$	0
$u = 1.343220 - 0.336289I$ $a = -1.02775 + 2.21581I$ $b = -0.05949 + 1.43435I$	$-7.46754 + 6.50190I$	0
$u = 1.376590 + 0.153168I$ $a = -0.007356 + 1.170020I$ $b = -0.632070 + 0.344676I$	$-6.25872 - 5.47972I$	0
$u = 1.376590 - 0.153168I$ $a = -0.007356 - 1.170020I$ $b = -0.632070 - 0.344676I$	$-6.25872 + 5.47972I$	0
$u = -0.501713 + 0.351989I$ $a = 0.250347 + 0.020930I$ $b = -0.377876 + 0.306739I$	$-1.234330 + 0.285895I$	$-7.26902 - 0.13078I$
$u = -0.501713 - 0.351989I$ $a = 0.250347 - 0.020930I$ $b = -0.377876 - 0.306739I$	$-1.234330 - 0.285895I$	$-7.26902 + 0.13078I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.338950 + 0.387128I$ $a = 0.548552 + 1.167370I$ $b = -0.746647 + 0.261104I$	$1.11467 - 11.46740I$	0
$u = 1.338950 - 0.387128I$ $a = 0.548552 - 1.167370I$ $b = -0.746647 - 0.261104I$	$1.11467 + 11.46740I$	0
$u = 1.350930 + 0.390369I$ $a = 2.24091 + 1.86991I$ $b = -0.29851 + 1.40822I$	$-4.2026 - 15.2588I$	0
$u = 1.350930 - 0.390369I$ $a = 2.24091 - 1.86991I$ $b = -0.29851 - 1.40822I$	$-4.2026 + 15.2588I$	0
$u = 1.409670 + 0.083415I$ $a = -0.11722 - 3.16504I$ $b = -0.16218 - 1.43303I$	$-12.99120 + 0.43188I$	0
$u = 1.409670 - 0.083415I$ $a = -0.11722 + 3.16504I$ $b = -0.16218 + 1.43303I$	$-12.99120 - 0.43188I$	0
$u = 1.40588 + 0.16480I$ $a = 1.49179 + 2.95937I$ $b = -0.23906 + 1.42598I$	$-11.9190 - 8.6567I$	0
$u = 1.40588 - 0.16480I$ $a = 1.49179 - 2.95937I$ $b = -0.23906 - 1.42598I$	$-11.9190 + 8.6567I$	0
$u = 0.011339 + 0.462213I$ $a = 1.055710 - 0.545353I$ $b = 0.125209 + 1.263110I$	$-2.24513 + 1.95677I$	$-0.38158 - 3.64483I$
$u = 0.011339 - 0.462213I$ $a = 1.055710 + 0.545353I$ $b = 0.125209 - 1.263110I$	$-2.24513 - 1.95677I$	$-0.38158 + 3.64483I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.260606 + 0.183987I$ $a = -2.74543 - 3.45998I$ $b = 0.215232 - 1.341580I$	$-3.38918 - 3.25880I$	$0.46002 + 3.22263I$
$u = 0.260606 - 0.183987I$ $a = -2.74543 + 3.45998I$ $b = 0.215232 + 1.341580I$	$-3.38918 + 3.25880I$	$0.46002 - 3.22263I$
$u = 0.109980 + 0.232584I$ $a = -0.60353 - 1.96816I$ $b = 0.557633 - 0.099372I$	$1.189920 - 0.442233I$	$6.78124 + 1.28723I$
$u = 0.109980 - 0.232584I$ $a = -0.60353 + 1.96816I$ $b = 0.557633 + 0.099372I$	$1.189920 + 0.442233I$	$6.78124 - 1.28723I$

II. $\boldsymbol{I_2^u = \langle b - a - 1,\ a^3 + 2a^2 + 3a + 1,\ u - 1\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} a \\ a+1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} a^2 + a + 1 \\ a^2 + 2a + 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0 \\ a^2 + a + 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1 \\ a+1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0 \\ a^2 + a + 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0 \\ a^2 + a + 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 5a^2 + 6a + 5$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_7 c_8	u^3
c_3	$u^3 + u^2 - 1$
c_4	$u^3 - u^2 + 2u - 1$
c_5, c_6	$(u-1)^3$
c_9	$(u+1)^3$
c_{10}	$u^3 - u^2 + 1$
c_{11}, c_{12}	$u^3 + u^2 + 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_7 c_8	y^3
c_3, c_{10}	$y^3 - y^2 + 2y - 1$
c_4, c_{11}, c_{12}	$y^3 + 3y^2 + 2y - 1$
c_5, c_6, c_9	$(y-1)^3$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = -0.78492 + 1.30714I$ $b = 0.215080 + 1.307140I$	$-4.66906 + 2.82812I$	$-5.17211 - 2.41717I$
$u = 1.00000$ $a = -0.78492 - 1.30714I$ $b = 0.215080 - 1.307140I$	$-4.66906 - 2.82812I$	$-5.17211 + 2.41717I$
$u = 1.00000$ $a = -0.430160$ $b = 0.569840$	-0.531480	3.34420

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_8	$u^3(u^{74} + 21u^{73} + \cdots + 848u + 64)$
c_2, c_7	$u^3(u^{74} + u^{73} + \cdots + 12u + 8)$
c_3	$(u^3 + u^2 - 1)(u^{74} - 2u^{73} + \cdots - 60u - 9)$
c_4	$(u^3 - u^2 + 2u - 1)(u^{74} + 2u^{73} + \cdots - 6u - 1)$
c_5, c_6	$((u-1)^3)(u^{74} - 4u^{73} + \cdots + u - 1)$
c_9	$((u+1)^3)(u^{74} - 4u^{73} + \cdots + u - 1)$
c_{10}	$(u^3 - u^2 + 1)(u^{74} + 18u^{73} + \cdots + 560u + 49)$
c_{11}, c_{12}	$(u^3 + u^2 + 2u + 1)(u^{74} + 2u^{73} + \cdots - 6u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_8	$y^3(y^{74} + 59y^{73} + \cdots - 36096y + 4096)$
c_2, c_7	$y^3(y^{74} - 21y^{73} + \cdots - 848y + 64)$
c_3	$(y^3 - y^2 + 2y - 1)(y^{74} - 6y^{73} + \cdots + 162y + 81)$
c_4, c_{11}, c_{12}	$(y^3 + 3y^2 + 2y - 1)(y^{74} + 66y^{73} + \cdots - 14y + 1)$
c_5, c_6, c_9	$((y-1)^3)(y^{74} - 60y^{73} + \cdots + 17y + 1)$
c_{10}	$(y^3 - y^2 + 2y - 1)(y^{74} + 6y^{73} + \cdots + 49882y + 2401)$