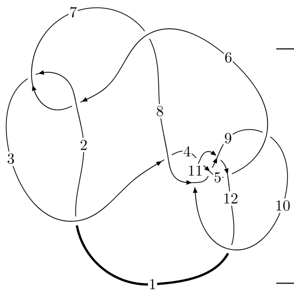
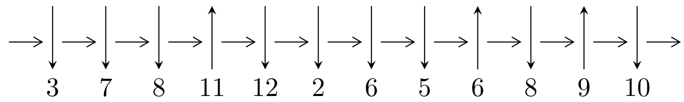
$12n_{0549}$ ($K12n_{0549}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I^u_1 &= \langle -u^3 - u^2 + b,\ a - u,\ u^4 + u^3 - 2u + 1\rangle\\
I^u_2 &= \langle -u^3 - u^2 + b,\ a - u,\ u^4 + u^3 + 1\rangle\\
I^u_3 &= \langle -u^4 + u^3 - u^2 + b,\ a - u,\ u^6 - u^5 + u^4 + u^3 + u^2 + u + 1\rangle\\
I^u_4 &= \langle -u^5 + 2u^4 - u^3 - u^2 + b,\ -u^3 + 2u^2 + a - u,\ u^6 - u^5 + u^4 + u^3 + u^2 + u + 1\rangle\\
I^u_5 &= \langle -u^4 - u^2 + 2b - u - 2,\ -3u^5 - u^4 - u^3 + 10a - 9u - 8,\ u^6 + 2u^5 + 2u^4 + 3u^2 + 6u + 5\rangle\\
I^u_6 &= \langle b - u,\ -u^2 + a + u,\ u^3 - u - 1\rangle\\
I^u_7 &= \langle b - u,\ u^2 + a - u + 1,\ u^3 - u^2 + 1\rangle\\
I^u_8 &= \langle -u^2 + b + u,\ a - u,\ u^3 - u^2 + 1\rangle\\
I^u_9 &= \langle b,\ a + 1,\ u + 1\rangle\\
I^u_{10} &= \langle b - 1,\ a,\ u - 1\rangle
\end{aligned}$$

$$I^u_{11} = \langle b - 1,\ a - 1,\ u - 1\rangle$$

$$I^v_1 = \langle a,\ b - 1,\ v + 1\rangle$$

* 12 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 39 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

I. $\boldsymbol{I^u_1 = \langle -u^3 - u^2 + b,\ a - u,\ u^4 + u^3 - 2u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -4u^3 - u^2 + 5u - 3 \\ 3u^3 - u^2 - 3u + 2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u^3 + u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 2u^3 + u^2 - 2u + 1 \\ -u^3 + u^2 + 2u - 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ 2u^2 - 2u + 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^3 - u^2 + u \\ u^3 + u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u^2 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^3 + 1 \\ -u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 3u^3 + 6u^2 - 12$

in decimal forms when there is not enough margin.

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^4 + u^3 + 6u^2 + 4u + 1$
c_2, c_5, c_6 c_8	$u^4 - u^3 + 2u + 1$
c_3	$u^4 + 8u^3 + 66u^2 + 56u + 13$
c_4, c_9	$u^4 + 6u^3 + 12u^2 + 9u + 3$
c_{10}, c_{12}	$u^4 - 2u^3 + 12u^2 + 7u + 1$
c_{11}	$u^4 + 4u^3 + 6u^2 + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^4 + 11y^3 + 30y^2 - 4y + 1$
c_2, c_5, c_6 c_8	$y^4 - y^3 + 6y^2 - 4y + 1$
c_3	$y^4 + 68y^3 + 3486y^2 - 1420y + 169$
c_4, c_9	$y^4 - 12y^3 + 42y^2 - 9y + 9$
c_{10}, c_{12}	$y^4 + 20y^3 + 174y^2 - 25y + 1$
c_{11}	$y^4 - 4y^3 + 30y^2 + 11y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.621964 + 0.187730I$ $a = 0.621964 + 0.187730I$ $b = 0.526439 + 0.444772I$	$-1.130960 - 0.250238I$	$-9.36589 + 2.03489I$
$u = 0.621964 - 0.187730I$ $a = 0.621964 - 0.187730I$ $b = 0.526439 - 0.444772I$	$-1.130960 + 0.250238I$	$-9.36589 - 2.03489I$
$u = -1.12196 + 1.05376I$ $a = -1.12196 + 1.05376I$ $b = 2.47356 + 0.44477I$	$17.5803 + 11.9291I$	$-4.13411 - 5.75934I$
$u = -1.12196 - 1.05376I$ $a = -1.12196 - 1.05376I$ $b = 2.47356 - 0.44477I$	$17.5803 - 11.9291I$	$-4.13411 + 5.75934I$

II. $\boldsymbol{I_2^u = \langle -u^3 - u^2 + b,\ a - u,\ u^4 + u^3 + 1 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^2 - u - 1 \\ -u^3 - u^2 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u^3 + u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^2 - 1 \\ u^3 + u^2 + 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^3 - u^2 + u \\ u^3 + u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 2u^3 + u^2 \\ -u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^3 - 1 \\ -u^2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -3u^3 + 6u^2 + 6u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^4 - u^3 + 2u^2 + 1$
c_2, c_5, c_8	$u^4 - u^3 + 1$
c_3	$(u+1)^4$
c_4, c_9	$u^4 + u + 1$
c_6	$u^4 + u^3 + 1$
c_7	$u^4 + u^3 + 2u^2 + 1$
c_{10}, c_{12}	$u^4 + 2u^2 - u + 1$
c_{11}	$u^4 - 4u^3 + 8u^2 - 9u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^4 + 3y^3 + 6y^2 + 4y + 1$
c_2, c_5, c_6 c_8	$y^4 - y^3 + 2y^2 + 1$
c_3	$(y-1)^4$
c_4, c_9	$y^4 + 2y^2 - y + 1$
c_{10}, c_{12}	$y^4 + 4y^3 + 6y^2 + 3y + 1$
c_{11}	$y^4 + 2y^2 - y + 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.518913 + 0.666610I$ $a = 0.518913 + 0.666610I$ $b = -0.727136 + 0.934099I$	$1.43949 - 4.22398I$	$-2.28100 + 7.42378I$
$u = 0.518913 - 0.666610I$ $a = 0.518913 - 0.666610I$ $b = -0.727136 - 0.934099I$	$1.43949 + 4.22398I$	$-2.28100 - 7.42378I$
$u = -1.018910 + 0.602565I$ $a = -1.018910 + 0.602565I$ $b = 0.727136 + 0.430014I$	$0.20545 + 7.54387I$	$-8.21900 - 8.72596I$
$u = -1.018910 - 0.602565I$ $a = -1.018910 - 0.602565I$ $b = 0.727136 - 0.430014I$	$0.20545 - 7.54387I$	$-8.21900 + 8.72596I$

III. $\boldsymbol{I_3^u = \langle -u^4 + u^3 - u^2 + b,\ a - u,\ u^6 - u^5 + u^4 + u^3 + u^2 + u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -2u^5 - 2u^4 - 2u^2 - 4u - 1 \\ u^5 + 2u^4 + 2u^2 + 3u + 1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u^4 - u^3 + u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^3 - 2u^2 - u - 2 \\ -u^3 + u^2 + u + 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^4 + u^3 - u^2 + u \\ u^4 - u^3 + u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -u^4 + u^3 - u^2 - 2u - 1 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u^5 - u^4 + u^3 + 2u^2 + u + 1 \\ -u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -5u^5 + 10u^4 - 11u^3 + u^2 - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^6 - u^5 + 5u^4 - 5u^3 + u^2 - u + 1$
c_2, c_5, c_6	$u^6 + u^5 + u^4 - u^3 + u^2 - u + 1$
c_3	$u^6 - 3u^5 + 45u^4 + u^3 + 155u^2 - 155u + 37$
c_4	$u^6 + 3u^5 - 4u^4 - 17u^3 + 2u^2 + 32u + 24$
c_8	$u^6 - 2u^5 + 2u^4 + 3u^2 - 6u + 5$
c_9	$u^6 - 5u^5 + 8u^4 - 9u^3 + 12u^2 - 2u + 3$
c_{10}	$u^6 + u^5 + 14u^4 + 19u^3 + 60u^2 + 44u + 61$
c_{11}	$u^6 - 2u^5 - u^4 + 7u^3 - 4u^2 - 4u + 8$
c_{12}	$u^6 - 7u^5 + 28u^4 - 65u^3 + 78u^2 - 32u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^6 + 9y^5 + 17y^4 - 15y^3 + y^2 + y + 1$
c_2, c_5, c_6	$y^6 + y^5 + 5y^4 + 5y^3 + y^2 + y + 1$
c_3	$y^6 + 81y^5 + 2341y^4 + 13093y^3 + 27665y^2 - 12555y + 1369$
c_4	$y^6 - 17y^5 + 122y^4 - 449y^3 + 900y^2 - 928y + 576$
c_8	$y^6 + 10y^4 - 2y^3 + 29y^2 - 6y + 25$
c_9	$y^6 - 9y^5 - 2y^4 + 97y^3 + 156y^2 + 68y + 9$
c_{10}	$y^6 + 27y^5 + 278y^4 + 1353y^3 + 3636y^2 + 5384y + 3721$
c_{11}	$y^6 - 6y^5 + 21y^4 - 41y^3 + 56y^2 - 80y + 64$
c_{12}	$y^6 + 7y^5 + 30y^4 - 295y^3 + 2204y^2 - 244y + 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.102788 + 0.875092I$ $a = 0.102788 + 0.875092I$ $b = 0.017830 + 0.550569I$	$2.61732 - 2.66854I$	$-0.25508 + 2.31468I$
$u = 0.102788 - 0.875092I$ $a = 0.102788 - 0.875092I$ $b = 0.017830 - 0.550569I$	$2.61732 + 2.66854I$	$-0.25508 - 2.31468I$
$u = -0.650074 + 0.404455I$ $a = -0.650074 + 0.404455I$ $b = 0.005272 - 1.244860I$	$0.04312 + 4.55341I$	$-9.55430 - 8.62438I$
$u = -0.650074 - 0.404455I$ $a = -0.650074 - 0.404455I$ $b = 0.005272 + 1.244860I$	$0.04312 - 4.55341I$	$-9.55430 + 8.62438I$
$u = 1.04729 + 1.04909I$ $a = 1.04729 + 1.04909I$ $b = -2.52310 - 0.11659I$	$17.9012 - 3.8563I$	$-3.69061 + 2.17548I$
$u = 1.04729 - 1.04909I$ $a = 1.04729 - 1.04909I$ $b = -2.52310 + 0.11659I$	$17.9012 + 3.8563I$	$-3.69061 - 2.17548I$

IV.

$\boldsymbol{I_4^u = \langle -u^5+2u^4-u^3-u^2+b,\ -u^3+2u^2+a-u,\ u^6-u^5+u^4+u^3+u^2+u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3+u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2+1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -2u^5-2u^4-2u^2-4u-1 \\ u^5+2u^4+2u^2+3u+1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^3-2u^2+u \\ u^5-2u^4+u^3+u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -2u^5+u^4-5u^2+1 \\ 2u^5-2u^4+2u^3+3u^2+u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ u^5-u^3+u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^5+2u^4-3u^2+u \\ u^5-2u^4+u^3+u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 2u^5-3u^4+3u^3+2u+2 \\ u^2-u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^5+2u^4-3u^3-u^2+u-2 \\ -u^4+2u^3-u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -5u^5+10u^4-11u^3+u^2-6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^6 - u^5 + 5u^4 - 5u^3 + u^2 - u + 1$
c_2, c_6, c_8	$u^6 + u^5 + u^4 - u^3 + u^2 - u + 1$
c_3	$u^6 - 3u^5 + 45u^4 + u^3 + 155u^2 - 155u + 37$
c_4	$u^6 - 5u^5 + 8u^4 - 9u^3 + 12u^2 - 2u + 3$
c_5	$u^6 - 2u^5 + 2u^4 + 3u^2 - 6u + 5$
c_9	$u^6 + 3u^5 - 4u^4 - 17u^3 + 2u^2 + 32u + 24$
c_{10}	$u^6 - 7u^5 + 28u^4 - 65u^3 + 78u^2 - 32u + 5$
c_{11}	$u^6 - 2u^5 - u^4 + 7u^3 - 4u^2 - 4u + 8$
c_{12}	$u^6 + u^5 + 14u^4 + 19u^3 + 60u^2 + 44u + 61$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^6 + 9y^5 + 17y^4 - 15y^3 + y^2 + y + 1$
c_2, c_6, c_8	$y^6 + y^5 + 5y^4 + 5y^3 + y^2 + y + 1$
c_3	$y^6 + 81y^5 + 2341y^4 + 13093y^3 + 27665y^2 - 12555y + 1369$
c_4	$y^6 - 9y^5 - 2y^4 + 97y^3 + 156y^2 + 68y + 9$
c_5	$y^6 + 10y^4 - 2y^3 + 29y^2 - 6y + 25$
c_9	$y^6 - 17y^5 + 122y^4 - 449y^3 + 900y^2 - 928y + 576$
c_{10}	$y^6 + 7y^5 + 30y^4 - 295y^3 + 2204y^2 - 244y + 25$
c_{11}	$y^6 - 6y^5 + 21y^4 - 41y^3 + 56y^2 - 80y + 64$
c_{12}	$y^6 + 27y^5 + 278y^4 + 1353y^3 + 3636y^2 + 5384y + 3721$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.102788 + 0.875092I$ $a = 1.378180 - 0.127101I$ $b = -1.77318 + 0.52382I$	$2.61732 - 2.66854I$	$-0.25508 + 2.31468I$
$u = 0.102788 - 0.875092I$ $a = 1.378180 + 0.127101I$ $b = -1.77318 - 0.52382I$	$2.61732 + 2.66854I$	$-0.25508 - 2.31468I$
$u = -0.650074 + 0.404455I$ $a = -1.12379 + 1.90276I$ $b = 0.968507 + 0.557933I$	$0.04312 + 4.55341I$	$-9.55430 - 8.62438I$
$u = -0.650074 - 0.404455I$ $a = -1.12379 - 1.90276I$ $b = 0.968507 - 0.557933I$	$0.04312 - 4.55341I$	$-9.55430 + 8.62438I$
$u = 1.04729 + 1.04909I$ $a = -1.25438 - 1.04838I$ $b = 2.30468 - 0.55501I$	$17.9012 - 3.8563I$	$-3.69061 + 2.17548I$
$u = 1.04729 - 1.04909I$ $a = -1.25438 + 1.04838I$ $b = 2.30468 + 0.55501I$	$17.9012 + 3.8563I$	$-3.69061 - 2.17548I$

V. $\boldsymbol{I_5^u =}$
$\boldsymbol{\langle -u^4-u^2+2b-u-2,\ -3u^5-u^4-u^3+10a-9u-8,\ u^6+2u^5+2u^4+3u^2+6u+5\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 4u^4 - u^3 + 5u + 10 \\ -u^5 - 4u^4 + u^3 - 6u - 10 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} \frac{3}{10}u^5 + \frac{1}{10}u^4 + \cdots + \frac{9}{10}u + \frac{4}{5} \\ \frac{1}{2}u^4 + \frac{1}{2}u^2 + \frac{1}{2}u + 1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} \frac{3}{10}u^5 + \frac{13}{5}u^4 + \cdots + \frac{12}{5}u + \frac{24}{5} \\ -\frac{1}{2}u^5 - 2u^4 - \frac{1}{2}u^3 - \frac{1}{2}u^2 - 3u - 4 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} \frac{3}{10}u^5 - \frac{2}{5}u^4 + \cdots + \frac{2}{5}u - \frac{1}{5} \\ \frac{1}{2}u^4 + \frac{1}{2}u^2 + \frac{1}{2}u + 1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} \frac{4}{5}u^5 + \frac{11}{10}u^4 + \cdots + \frac{29}{10}u + \frac{14}{5} \\ -\frac{1}{2}u^5 - \frac{1}{2}u^4 - 2u - \frac{3}{2} \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -\frac{3}{10}u^5 - \frac{1}{10}u^4 + \cdots - \frac{2}{5}u - \frac{3}{10} \\ \frac{1}{2}u^5 + \frac{1}{2}u^4 + u + \frac{3}{2} \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{1}{2}u^5 + \frac{3}{2}u^4 + \frac{5}{2}u^3 + 3u^2 - \frac{3}{2}u - 1$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^6 + 10u^4 + 2u^3 + 29u^2 + 6u + 25$
c_2, c_6	$u^6 - 2u^5 + 2u^4 + 3u^2 - 6u + 5$
c_3	$u^6 + 2u^5 + 92u^4 + 48u^3 + 977u^2 + 228u + 785$
c_4, c_9	$u^6 - 5u^5 + 8u^4 - 9u^3 + 12u^2 - 2u + 3$
c_5, c_8	$u^6 + u^5 + u^4 - u^3 + u^2 - u + 1$
c_{10}, c_{12}	$u^6 + 4u^5 + 18u^4 + 66u^3 + 77u^2 - 18u + 1$
c_{11}	$u^6 + 9u^5 + 35u^4 + 71u^3 + 75u^2 + 33u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^6 + 20y^5 + 158y^4 + 626y^3 + 1317y^2 + 1414y + 625$
c_2, c_6	$y^6 + 10y^4 - 2y^3 + 29y^2 - 6y + 25$
c_3	$y^6 + 180y^5 + \cdots + 1481906y + 616225$
c_4, c_9	$y^6 - 9y^5 - 2y^4 + 97y^3 + 156y^2 + 68y + 9$
c_5, c_8	$y^6 + y^5 + 5y^4 + 5y^3 + y^2 + y + 1$
c_{10}, c_{12}	$y^6 + 20y^5 - 50y^4 - 1438y^3 + 8341y^2 - 170y + 1$
c_{11}	$y^6 - 11y^5 + 97y^4 - 375y^3 + 1289y^2 - 339y + 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.858009 + 0.695194I$ $a = 0.428810 + 0.557108I$ $b = 0.017830 - 0.550569I$	$2.61732 + 2.66854I$	$-0.25508 - 2.31468I$
$u = -0.858009 - 0.695194I$ $a = 0.428810 - 0.557108I$ $b = 0.017830 + 0.550569I$	$2.61732 - 2.66854I$	$-0.25508 + 2.31468I$
$u = 0.909086 + 0.930307I$ $a = 0.428314 + 0.140128I$ $b = 0.005272 + 1.244860I$	$0.04312 - 4.55341I$	$-9.55430 + 8.62438I$
$u = 0.909086 - 0.930307I$ $a = 0.428314 - 0.140128I$ $b = 0.005272 - 1.244860I$	$0.04312 + 4.55341I$	$-9.55430 - 8.62438I$
$u = -1.05108 + 1.14831I$ $a = 1.042880 - 0.951271I$ $b = -2.52310 - 0.11659I$	$17.9012 - 3.8563I$	$-3.69061 + 2.17548I$
$u = -1.05108 - 1.14831I$ $a = 1.042880 + 0.951271I$ $b = -2.52310 + 0.11659I$	$17.9012 + 3.8563I$	$-3.69061 - 2.17548I$

VI. $I_6^u = \langle b - u,\ -u^2 + a + u,\ u^3 - u - 1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -5u^2 - 2u - 5$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{10}, c_{12}	$u^3 - 2u^2 + u - 1$
c_2, c_4, c_9	$u^3 - u + 1$
c_3	$u^3 + 2u^2 - 3u + 1$
c_5, c_8	$u^3 + u^2 - 1$
c_6	$u^3 - u - 1$
c_7	$u^3 + 2u^2 + u + 1$
c_{11}	$u^3 - 5u^2 + 8u - 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7, c_{10} c_{12}	$y^3 - 2y^2 - 3y - 1$
c_2, c_4, c_6 c_9	$y^3 - 2y^2 + y - 1$
c_3	$y^3 - 10y^2 + 5y - 1$
c_5, c_8	$y^3 - y^2 + 2y - 1$
c_{11}	$y^3 - 9y^2 + 14y - 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_6^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.662359 + 0.562280I$ $a = 0.78492 - 1.30714I$ $b = -0.662359 + 0.562280I$	$1.37919 - 2.82812I$	$-4.28809 + 2.59975I$
$u = -0.662359 - 0.562280I$ $a = 0.78492 + 1.30714I$ $b = -0.662359 - 0.562280I$	$1.37919 + 2.82812I$	$-4.28809 - 2.59975I$
$u = 1.32472$ $a = 0.430160$ $b = 1.32472$	-2.75839	-16.4240

VII. $\boldsymbol{I_7^u = \langle b - u,\ u^2 + a - u + 1,\ u^3 - u^2 + 1\rangle}$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -2u^2 + 7u - 10$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_7^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = -0.337641 - 0.562280I$ $b = 0.877439 + 0.744862I$	$1.37919 - 2.82812I$	$-4.28809 + 2.59975I$
$u = 0.877439 - 0.744862I$ $a = -0.337641 + 0.562280I$ $b = 0.877439 - 0.744862I$	$1.37919 + 2.82812I$	$-4.28809 - 2.59975I$
$u = -0.754878$ $a = -2.32472$ $b = -0.754878$	-2.75839	-16.4240

VIII. $I_8^u = \langle -u^2 + b + u,\ a - u,\ u^3 - u^2 + 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u \\ -u^2 + u + 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} u \\ u^2 - u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^2 + u - 1 \\ -u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 - 1 \\ -u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^2 + 2u \\ u^2 - u \end{pmatrix}$$

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

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -2u^2 + 7u - 10$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_8^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = 0.877439 + 0.744862I$ $b = -0.662359 + 0.562280I$	$1.37919 - 2.82812I$	$-4.28809 + 2.59975I$
$u = 0.877439 - 0.744862I$ $a = 0.877439 - 0.744862I$ $b = -0.662359 - 0.562280I$	$1.37919 + 2.82812I$	$-4.28809 - 2.59975I$
$u = -0.754878$ $a = -0.754878$ $b = 1.32472$	-2.75839	-16.4240

IX. $I_9^u = \langle b,\ a+1,\ u+1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -18$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_9^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$ $a = -1.00000$ $b = 0$	-4.93480	-18.0000

X. $I_{10}^{u} = \langle b-1,\ a,\ u-1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_{10}^u		$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	1.00000		
$a =$	0	−1.64493	−6.00000
$b =$	1.00000		

XI. $I^u_{11} = \langle b-1,\ a-1,\ u-1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I^u_{11}	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = 1.00000$ $b = 1.00000$	-1.64493	-6.00000

XII. $\boldsymbol{I_1^v = \langle a,\ b-1,\ v+1 \rangle}$

(i) Arc colorings

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -6$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -1.00000$ $a = \quad 0$ $b = \quad 1.00000$	-1.64493	-6.00000

XIII. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u(u+1)^3(u^3-2u^2+u-1)(u^3-u^2+2u-1)^2(u^4-u^3+2u^2+1)$ $\cdot(u^4+u^3+6u^2+4u+1)(u^6+10u^4+2u^3+29u^2+6u+25)$ $\cdot(u^6-u^5+5u^4-5u^3+u^2-u+1)^2$
c_2, c_5, c_8	$u(u-1)(u+1)^2(u^3-u+1)(u^3+u^2-1)^2(u^4-u^3+1)(u^4-u^3+2u+1)$ $\cdot(u^6-2u^5+2u^4+3u^2-6u+5)(u^6+u^5+u^4-u^3+u^2-u+1)^2$
c_3	$u(u-1)(u+1)^6(u^3-u^2+2u-1)^2(u^3+2u^2-3u+1)$ $\cdot(u^4+8u^3+66u^2+56u+13)$ $\cdot(u^6-3u^5+45u^4+u^3+155u^2-155u+37)^2$ $\cdot(u^6+2u^5+92u^4+48u^3+977u^2+228u+785)$
c_4, c_9	$u(u+1)^3(u^3-u+1)^2(u^3+u^2-1)(u^4+u+1)(u^4+6u^3+\cdots+9u+3)$ $\cdot(u^6-5u^5+8u^4-9u^3+12u^2-2u+3)^2$ $\cdot(u^6+3u^5-4u^4-17u^3+2u^2+32u+24)$
c_6	$u(u-1)(u+1)^2(u^3-u-1)(u^3-u^2+1)^2(u^4-u^3+2u+1)(u^4+u^3+1)$ $\cdot(u^6-2u^5+2u^4+3u^2-6u+5)(u^6+u^5+u^4-u^3+u^2-u+1)^2$
c_7	$u(u+1)^3(u^3+u^2+2u+1)^2(u^3+2u^2+u+1)(u^4+u^3+2u^2+1)$ $\cdot(u^4+u^3+6u^2+4u+1)(u^6+10u^4+2u^3+29u^2+6u+25)$ $\cdot(u^6-u^5+5u^4-5u^3+u^2-u+1)^2$
c_{10}, c_{12}	$u(u-1)(u+1)^8(u^3-2u^2+u-1)(u^4+2u^2-u+1)$ $\cdot(u^4-2u^3+12u^2+7u+1)(u^6-7u^5+\cdots-32u+5)$ $\cdot(u^6+u^5+14u^4+19u^3+60u^2+44u+61)$ $\cdot(u^6+4u^5+18u^4+66u^3+77u^2-18u+1)$
c_{11}	$u^7(u-1)^2(u+1)(u^3-5u^2+8u-5)(u^4-4u^3+8u^2-9u+5)$ $\cdot(u^4+4u^3+6u^2+u+1)(u^6-2u^5-u^4+7u^3-4u^2-4u+8)^2$ $\cdot(u^6+9u^5+35u^4+71u^3+75u^2+33u+5)$

XIV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y(y-1)^3(y^3-2y^2-3y-1)(y^3+3y^2+2y-1)^2$ $\cdot (y^4+3y^3+6y^2+4y+1)(y^4+11y^3+30y^2-4y+1)$ $\cdot (y^6+9y^5+17y^4-15y^3+y^2+y+1)^2$ $\cdot (y^6+20y^5+158y^4+626y^3+1317y^2+1414y+625)$
c_2, c_5, c_6 c_8	$y(y-1)^3(y^3-2y^2+y-1)(y^3-y^2+2y-1)^2(y^4-y^3+2y^2+1)$ $\cdot (y^4-y^3+6y^2-4y+1)(y^6+10y^4-2y^3+29y^2-6y+25)$ $\cdot (y^6+y^5+5y^4+5y^3+y^2+y+1)^2$
c_3	$y(y-1)^7(y^3-10y^2+5y-1)(y^3+3y^2+2y-1)^2$ $\cdot (y^4+68y^3+3486y^2-1420y+169)$ $\cdot (y^6+81y^5+2341y^4+13093y^3+27665y^2-12555y+1369)^2$ $\cdot (y^6+180y^5+\cdots+1481906y+616225)$
c_4, c_9	$y(y-1)^3(y^3-2y^2+y-1)^2(y^3-y^2+2y-1)(y^4+2y^2-y+1)$ $\cdot (y^4-12y^3+42y^2-9y+9)$ $\cdot (y^6-17y^5+122y^4-449y^3+900y^2-928y+576)$ $\cdot (y^6-9y^5-2y^4+97y^3+156y^2+68y+9)^2$
c_{10}, c_{12}	$y(y-1)^9(y^3-2y^2-3y-1)(y^4+4y^3+6y^2+3y+1)$ $\cdot (y^4+20y^3+174y^2-25y+1)$ $\cdot (y^6+7y^5+30y^4-295y^3+2204y^2-244y+25)$ $\cdot (y^6+20y^5-50y^4-1438y^3+8341y^2-170y+1)$ $\cdot (y^6+27y^5+278y^4+1353y^3+3636y^2+5384y+3721)$
c_{11}	$y^7(y-1)^3(y^3-9y^2+14y-25)(y^4+2y^2-y+25)$ $\cdot (y^4-4y^3+30y^2+11y+1)$ $\cdot (y^6-11y^5+97y^4-375y^3+1289y^2-339y+25)$ $\cdot (y^6-6y^5+21y^4-41y^3+56y^2-80y+64)^2$