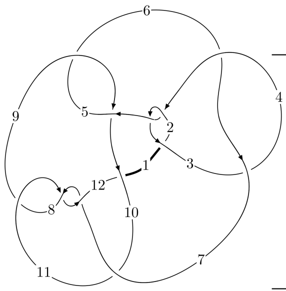
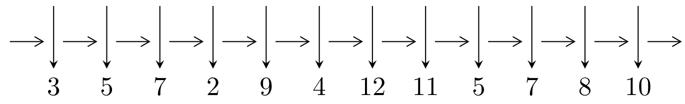
$12n_{0110}$ ($K12n_{0110}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle 133471u^{25} + 669325u^{24} + \cdots + 3665628b - 2077739, \\
&\quad - 1424696u^{25} - 7258133u^{24} + \cdots + 3665628a + 94549,\ u^{26} + 5u^{25} + \cdots - u + 1\rangle \\
I_2^u &= \langle b + u,\ u^2 + a - u + 3,\ u^3 - u^2 + 2u - 1\rangle \\
I_3^u &= \langle b,\ 2u^2 + a + u + 4,\ u^3 + 2u - 1\rangle \\
I_4^u &= \langle -2u^2a - au - u^2 + 5b - 3a - 3u + 1,\ a^2 + 2u^2 + a + 2,\ u^3 - u^2 + 2u - 1\rangle \\
I_5^u &= \langle b,\ -u^2 + a - u - 1,\ u^4 + u^3 + 2u^2 + 2u + 1\rangle
\end{aligned}$$

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 42 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.
$I_1^u = \langle 1.33\times 10^5 u^{25} + 6.69\times 10^5 u^{24} + \cdots + 3.67\times 10^6 b - 2.08\times 10^6,\ -1.42\times 10^6 u^{25} - 7.26\times 10^6 u^{24} + \cdots + 3.67\times 10^6 a + 9.45\times 10^4,\ u^{26} + 5u^{25} + \cdots - u + 1\rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0.388664u^{25} + 1.98005u^{24} + \cdots + 4.43142u - 0.0257934 \\ -0.0364115u^{25} - 0.182595u^{24} + \cdots + 0.168887u + 0.566817 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.352252u^{25} + 1.79746u^{24} + \cdots + 4.60030u + 0.541023 \\ -0.0364115u^{25} - 0.182595u^{24} + \cdots + 0.168887u + 0.566817 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.00205667u^{25} - 0.185867u^{24} + \cdots - 3.15088u + 1.35901 \\ 0.207590u^{25} + 1.02161u^{24} + \cdots - 0.929535u - 0.00263065 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.0668167u^{25} + 0.120495u^{24} + \cdots - 3.91725u + 1.01430 \\ 0.213589u^{25} + 1.06741u^{24} + \cdots - 1.08111u + 0.0668167 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.281381u^{25} - 1.19353u^{24} + \cdots + 2.43481u + 0.262430 \\ -0.213589u^{25} - 1.06741u^{24} + \cdots + 1.08111u - 0.0668167 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^3 + 2u \\ u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^7 - 4u^5 - 4u^3 \\ -u^7 - 3u^5 - 2u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{112969}{610938}u^{25} - \frac{563647}{610938}u^{24} + \cdots - \frac{59207}{1221876}u - \frac{10043435}{1221876}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{26} - 3u^{25} + \cdots + 284u + 1$
c_2, c_4	$u^{26} - 11u^{25} + \cdots + 6u + 1$
c_3, c_6	$u^{26} - 4u^{25} + \cdots - 64u - 128$
c_5, c_9	$u^{26} + 2u^{25} + \cdots - 2048u - 512$
c_7, c_8, c_{11}	$u^{26} - 5u^{25} + \cdots + u + 1$
c_{10}	$u^{26} + 5u^{25} + \cdots + 1376u + 292$
c_{12}	$u^{26} + u^{25} + \cdots - 1131u + 99$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{26} + 75y^{25} + \cdots - 58160y + 1$
c_2, c_4	$y^{26} + 3y^{25} + \cdots - 284y + 1$
c_3, c_6	$y^{26} + 54y^{25} + \cdots - 421888y + 16384$
c_5, c_9	$y^{26} + 56y^{25} + \cdots - 5636096y + 262144$
c_7, c_8, c_{11}	$y^{26} + 29y^{25} + \cdots + 19y + 1$
c_{10}	$y^{26} + 33y^{25} + \cdots + 2440488y + 85264$
c_{12}	$y^{26} + 65y^{25} + \cdots + 226431y + 9801$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.922033 + 0.504258I$ $a = -1.58448 - 0.11744I$ $b = -0.82029 + 2.30398I$	$15.8271 + 7.8059I$	$-9.96367 - 4.06326I$
$u = -0.922033 - 0.504258I$ $a = -1.58448 + 0.11744I$ $b = -0.82029 - 2.30398I$	$15.8271 - 7.8059I$	$-9.96367 + 4.06326I$
$u = -0.876316 + 0.685407I$ $a = 0.907139 - 0.269953I$ $b = -0.52680 - 2.57055I$	$16.3557 - 1.8854I$	$-9.21556 - 0.32820I$
$u = -0.876316 - 0.685407I$ $a = 0.907139 + 0.269953I$ $b = -0.52680 + 2.57055I$	$16.3557 + 1.8854I$	$-9.21556 + 0.32820I$
$u = -0.310950 + 0.788647I$ $a = -1.030360 - 0.414279I$ $b = -0.383630 + 1.328970I$	$3.78741 - 0.69574I$	$-7.19922 + 0.53889I$
$u = -0.310950 - 0.788647I$ $a = -1.030360 + 0.414279I$ $b = -0.383630 - 1.328970I$	$3.78741 + 0.69574I$	$-7.19922 - 0.53889I$
$u = 0.120825 + 1.259610I$ $a = -0.370078 - 0.116328I$ $b = 0.006697 + 0.465321I$	$3.03417 - 1.95544I$	$-4.88432 + 3.72797I$
$u = 0.120825 - 1.259610I$ $a = -0.370078 + 0.116328I$ $b = 0.006697 - 0.465321I$	$3.03417 + 1.95544I$	$-4.88432 - 3.72797I$
$u = 0.208874 + 1.332040I$ $a = -2.13409 + 1.95191I$ $b = -0.471849 - 0.213919I$	$1.74705 - 2.61908I$	$-28.5726 + 3.9663I$
$u = 0.208874 - 1.332040I$ $a = -2.13409 - 1.95191I$ $b = -0.471849 + 0.213919I$	$1.74705 + 2.61908I$	$-28.5726 - 3.9663I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.525198 + 0.265240I$ $a = 1.16923 - 0.91232I$ $b = 0.181981 - 1.063290I$	$2.08935 + 3.66090I$	$-6.80246 - 8.91631I$
$u = -0.525198 - 0.265240I$ $a = 1.16923 + 0.91232I$ $b = 0.181981 + 1.063290I$	$2.08935 - 3.66090I$	$-6.80246 + 8.91631I$
$u = -0.18444 + 1.43942I$ $a = 0.520303 + 0.741442I$ $b = 0.441502 - 0.900551I$	$7.67139 + 6.20240I$	$-4.64456 - 7.21742I$
$u = -0.18444 - 1.43942I$ $a = 0.520303 - 0.741442I$ $b = 0.441502 + 0.900551I$	$7.67139 - 6.20240I$	$-4.64456 + 7.21742I$
$u = 0.521911$ $a = -6.33214$ $b = -0.265813$	-2.54481	-86.8730
$u = 0.14645 + 1.51159I$ $a = -1.051750 + 0.162879I$ $b = 1.46948 - 0.48937I$	$5.01908 - 1.34239I$	$-6.85851 + 0.18617I$
$u = 0.14645 - 1.51159I$ $a = -1.051750 - 0.162879I$ $b = 1.46948 + 0.48937I$	$5.01908 + 1.34239I$	$-6.85851 - 0.18617I$
$u = -0.35319 + 1.54442I$ $a = -1.05184 - 1.89806I$ $b = -1.06767 + 2.09935I$	$-17.0555 + 12.4841I$	$-7.58939 - 4.89118I$
$u = -0.35319 - 1.54442I$ $a = -1.05184 + 1.89806I$ $b = -1.06767 - 2.09935I$	$-17.0555 - 12.4841I$	$-7.58939 + 4.89118I$
$u = 0.406135$ $a = -0.606983$ $b = 0.253631$	-0.735338	-13.2750

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.06274+1.65934I$ $a=\ \ 0.46673-1.82293I$ $b=-1.39474+2.17520I$	$12.38470+0.60705I$	$-6.03823+0.I$
$u=-0.06274-1.65934I$ $a=\ \ 0.46673+1.82293I$ $b=-1.39474-2.17520I$	$12.38470-0.60705I$	$-6.03823+0.I$
$u=-0.30091+1.65456I$ $a=\ \ 1.14317+1.77349I$ $b=-0.09116-3.00698I$	$-15.3762+2.6062I$	$-6.76990-0.82332I$
$u=-0.30091-1.65456I$ $a=\ \ 1.14317-1.77349I$ $b=-0.09116+3.00698I$	$-15.3762-2.6062I$	$-6.76990+0.82332I$
$u=\ \ 0.095602+0.202458I$ $a=-0.51442+1.84308I$ $b=\ \ 0.662563+0.037560I$	$-0.945468+0.077764I$	$-9.88736+1.05285I$
$u=\ \ 0.095602-0.202458I$ $a=-0.51442-1.84308I$ $b=\ \ 0.662563-0.037560I$	$-0.945468-0.077764I$	$-9.88736-1.05285I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -4u^2+5u-16$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.215080 + 1.307140I$ $a = -1.122560 + 0.744862I$ $b = -0.215080 - 1.307140I$	$6.04826 - 5.65624I$	$-8.27516 + 4.28659I$
$u = 0.215080 - 1.307140I$ $a = -1.122560 - 0.744862I$ $b = -0.215080 + 1.307140I$	$6.04826 + 5.65624I$	$-8.27516 - 4.28659I$
$u = 0.569840$ $a = -2.75488$ $b = -0.569840$	-2.22691	-14.4500

III. $I_3^u = \langle b,\ 2u^2 + a + u + 4,\ u^3 + 2u - 1\rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2u^2 - u - 4 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -2u^2 - u - 4 \\ 0 \end{pmatrix}$$

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

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

$$a_9 = \begin{pmatrix} u^2 + 1 \\ u \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -2u^2 - 2u - 4 \\ u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ -u + 1 \end{pmatrix}$$

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

(ii) Obstruction class $= 1$

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

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^3$
c_3, c_6	y^3
c_5, c_7, c_8 c_9, c_{11}, c_{12}	$y^3 + 4y^2 + 4y - 1$
c_{10}	$y^3 + y^2 + 13y - 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.22670 + 1.46771I$ $a = 0.432268 - 0.136798I$ $b = 0$	$7.79580 + 5.13794I$	$-4.53505 - 0.52866I$
$u = -0.22670 - 1.46771I$ $a = 0.432268 + 0.136798I$ $b = 0$	$7.79580 - 5.13794I$	$-4.53505 + 0.52866I$
$u = 0.453398$ $a = -4.86454$ $b = 0$	-2.43213	3.07010

IV.

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

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} a \\ \frac{2}{5}u^2a + \frac{1}{5}u^2 + \cdots + \frac{3}{5}a - \frac{1}{5} \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} \frac{2}{5}u^2a + \frac{1}{5}u^2 + \cdots + \frac{8}{5}a - \frac{1}{5} \\ \frac{2}{5}u^2a + \frac{1}{5}u^2 + \cdots + \frac{3}{5}a - \frac{1}{5} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} \frac{1}{5}u^2a + \frac{8}{5}u^2 + \cdots + \frac{4}{5}a + \frac{17}{5} \\ -\frac{1}{5}u^2a + \frac{2}{5}u^2 + \cdots + \frac{1}{5}a + \frac{8}{5} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^2 - u + 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^2 + 1 \\ u^2 - u + 1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} \frac{1}{5}u^2a + \frac{8}{5}u^2 + \cdots + \frac{4}{5}a + \frac{17}{5} \\ -\frac{1}{5}u^2a + \frac{2}{5}u^2 + \cdots + \frac{1}{5}a + \frac{8}{5} \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 2u^2 + a - u + 3 \\ -\frac{1}{5}u^2a + \frac{2}{5}u^2 + \cdots + \frac{1}{5}a + \frac{8}{5} \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^2 + 1 \\ u^2 - u + 1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{7}{5}u^2a - \frac{16}{5}au - \frac{11}{5}u^2 + \frac{12}{5}a + \frac{22}{5}u - \frac{54}{5}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ \ 0.215080 + 1.307140I$ $a = \ \ 0.824718 - 0.424452I$ $b = -0.215080 + 1.307140I$	6.04826	$-4.97493 - 1.29886I$
$u = \ \ 0.215080 + 1.307140I$ $a = -1.82472 + 0.42445I$ $b = -0.569840$	$1.91067 - 2.82812I$	$-11.4570 + 15.2977I$
$u = \ \ 0.215080 - 1.307140I$ $a = \ \ 0.824718 + 0.424452I$ $b = -0.215080 - 1.307140I$	6.04826	$-4.97493 + 1.29886I$
$u = \ \ 0.215080 - 1.307140I$ $a = -1.82472 - 0.42445I$ $b = -0.569840$	$1.91067 + 2.82812I$	$-11.4570 - 15.2977I$
$u = \ \ 0.569840$ $a = -0.50000 + 1.54901I$ $b = -0.215080 + 1.307140I$	$1.91067 + 2.82812I$	$-9.06804 + 0.18883I$
$u = \ \ 0.569840$ $a = -0.50000 - 1.54901I$ $b = -0.215080 - 1.307140I$	$1.91067 - 2.82812I$	$-9.06804 - 0.18883I$

V. $I_5^u = \langle b,\ -u^2+a-u-1,\ u^4+u^3+2u^2+2u+1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^3+3u^2-u-10$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.621744 + 0.440597I$ $a = 0.570696 - 0.107280I$ $b = 0$	$1.64493 + 2.02988I$	$-8.92268 - 2.50966I$
$u = -0.621744 - 0.440597I$ $a = 0.570696 + 0.107280I$ $b = 0$	$1.64493 - 2.02988I$	$-8.92268 + 2.50966I$
$u = 0.121744 + 1.306620I$ $a = -0.57070 + 1.62477I$ $b = 0$	$1.64493 - 2.02988I$	$-14.5773 + 1.8205I$
$u = 0.121744 - 1.306620I$ $a = -0.57070 - 1.62477I$ $b = 0$	$1.64493 + 2.02988I$	$-14.5773 - 1.8205I$

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^7)(u^3-u^2+2u-1)^3(u^{26}-3u^{25}+\cdots+284u+1)$
c_2	$((u-1)^7)(u^3+u^2-1)^3(u^{26}-11u^{25}+\cdots+6u+1)$
c_3	$u^7(u^3-u^2+2u-1)^3(u^{26}-4u^{25}+\cdots-64u-128)$
c_4	$((u+1)^7)(u^3-u^2+1)^3(u^{26}-11u^{25}+\cdots+6u+1)$
c_5	$u^9(u^3+2u-1)(u^4+u^3+\cdots+2u+1)(u^{26}+2u^{25}+\cdots-2048u-512)$
c_6	$u^7(u^3+u^2+2u+1)^3(u^{26}-4u^{25}+\cdots-64u-128)$
c_7, c_8	$(u^3+2u-1)(u^3-u^2+2u-1)^3(u^4+u^3+2u^2+2u+1)$ $\cdot(u^{26}-5u^{25}+\cdots+u+1)$
c_9	$u^9(u^3+2u+1)(u^4-u^3+\cdots-2u+1)(u^{26}+2u^{25}+\cdots-2048u-512)$
c_{10}	$(u^2-u+1)^2(u^3-u^2+1)^3(u^3+3u^2+5u+2)$ $\cdot(u^{26}+5u^{25}+\cdots+1376u+292)$
c_{11}	$(u^3+2u+1)(u^3+u^2+2u+1)^3(u^4-u^3+2u^2-2u+1)$ $\cdot(u^{26}-5u^{25}+\cdots+u+1)$
c_{12}	$(u^3+2u+1)(u^3-u^2+1)^3(u^4-u^3+2u^2-2u+1)$ $\cdot(u^{26}+u^{25}+\cdots-1131u+99)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^7)(y^3+3y^2+2y-1)^3(y^{26}+75y^{25}+\cdots-58160y+1)$
c_2, c_4	$((y-1)^7)(y^3-y^2+2y-1)^3(y^{26}+3y^{25}+\cdots-284y+1)$
c_3, c_6	$y^7(y^3+3y^2+2y-1)^3(y^{26}+54y^{25}+\cdots-421888y+16384)$
c_5, c_9	$y^9(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)$ $\cdot\,(y^{26}+56y^{25}+\cdots-5636096y+262144)$
c_7, c_8, c_{11}	$(y^3+3y^2+2y-1)^3(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)$ $\cdot\,(y^{26}+29y^{25}+\cdots+19y+1)$
c_{10}	$(y^2+y+1)^2(y^3-y^2+2y-1)^3(y^3+y^2+13y-4)$ $\cdot\,(y^{26}+33y^{25}+\cdots+2440488y+85264)$
c_{12}	$(y^3-y^2+2y-1)^3(y^3+4y^2+4y-1)(y^4+3y^3+2y^2+1)$ $\cdot\,(y^{26}+65y^{25}+\cdots+226431y+9801)$