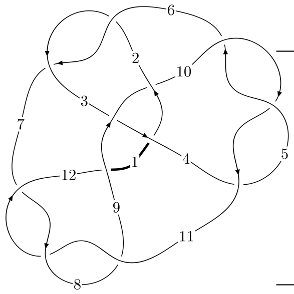
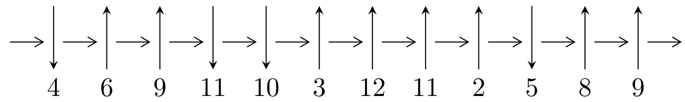
$12n_{0774}$ ($K12n_{0774}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 6.62437 \times 10^{34}u^{37} - 3.38900 \times 10^{34}u^{36} + \cdots + 1.55713 \times 10^{36}b + 2.95623 \times 10^{35}, \\
& -1.51031 \times 10^{35}u^{37} - 6.63829 \times 10^{35}u^{36} + \cdots + 4.82710 \times 10^{37}a + 1.02169 \times 10^{38}, \\
& u^{38} - u^{37} + \cdots - 43u + 31\rangle \\
I_2^u = \langle & -u^4 - 2u^2 + b,\ -2u^9 - 12u^7 + u^6 - 26u^5 + 6u^4 - 25u^3 + 10u^2 + a - 11u + 4, \\
& u^{10} + 6u^8 - u^7 + 13u^6 - 5u^5 + 13u^4 - 8u^3 + 7u^2 - 4u + 1\rangle \\
I_3^u = \langle & b + u,\ a - u + 1,\ u^3 + 2u + 1\rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 51 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. $\boldsymbol{I_1^u = \langle 6.62 \times 10^{34} u^{37} - 3.39 \times 10^{34} u^{36} + \cdots + 1.56 \times 10^{36} b + 2.96 \times 10^{35},\ -1.51 \times 10^{35} u^{37} - 6.64 \times 10^{35} u^{36} + \cdots + 4.83 \times 10^{37} a + 1.02 \times 10^{38},\ u^{38} - u^{37} + \cdots - 43u + 31\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.00312880u^{37} + 0.0137521u^{36} + \cdots - 0.745993u - 2.11658 \\ -0.0425422u^{37} + 0.0217644u^{36} + \cdots + 0.229678u - 0.189851 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.0394133u^{37} + 0.0355165u^{36} + \cdots - 0.516316u - 2.30643 \\ -0.0425422u^{37} + 0.0217644u^{36} + \cdots + 0.229678u - 0.189851 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.0349433u^{37} - 0.0282337u^{36} + \cdots + 3.18335u - 1.12201 \\ 0.00748664u^{37} - 0.0301041u^{36} + \cdots + 1.94650u - 0.496751 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.0134487u^{37} - 0.0104237u^{36} + \cdots + 1.71946u - 0.562332 \\ -0.0504426u^{37} + 0.0543512u^{36} + \cdots - 0.337341u + 1.77353 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.0100216u^{37} - 0.0217773u^{36} + \cdots + 2.92598u - 1.52154 \\ -0.0285363u^{37} + 0.118276u^{36} + \cdots - 1.14068u - 0.466351 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.0349433u^{37} - 0.0282337u^{36} + \cdots + 3.18335u - 1.12201 \\ -0.0450590u^{37} + 0.00970789u^{36} + \cdots + 1.15176u - 0.704747 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0.0447886u^{37} - 0.00640128u^{36} + \cdots - 3.64544u + 0.609170 \\ -0.0494523u^{37} + 0.0164682u^{36} + \cdots - 0.878416u - 0.773098 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0331406u^{37} + 0.0412227u^{36} + \cdots - 15.9826u - 0.691715$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{38} - 5u^{37} + \cdots - 5335u + 599$
c_2, c_6	$u^{38} - 4u^{37} + \cdots + 538u - 98$
c_3	$u^{38} - u^{37} + \cdots - 6836u + 799$
c_4, c_5, c_{10}	$u^{38} - u^{37} + \cdots - 43u + 31$
c_7, c_8, c_{11}	$u^{38} + u^{37} + \cdots - 33u - 1$
c_9	$u^{38} + 2u^{37} + \cdots + 85u - 51$
c_{12}	$u^{38} - u^{37} + \cdots - 7672u - 232$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{38} - 57y^{37} + \cdots + 6455881y + 358801$
c_2, c_6	$y^{38} - 18y^{37} + \cdots - 108928y + 9604$
c_3	$y^{38} + 51y^{37} + \cdots - 5168514y + 638401$
c_4, c_5, c_{10}	$y^{38} + 35y^{37} + \cdots - 1911y + 961$
c_7, c_8, c_{11}	$y^{38} + 53y^{37} + \cdots - 1289y + 1$
c_9	$y^{38} - 18y^{37} + \cdots - 30685y + 2601$
c_{12}	$y^{38} + 137y^{37} + \cdots - 68527952y + 53824$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.638019 + 0.750388I$ $a = -0.0267617 + 0.1147200I$ $b = 0.722696 + 0.604621I$	$0.0307983 + 0.0668754I$	$5.97468 + 0.20302I$
$u = -0.638019 - 0.750388I$ $a = -0.0267617 - 0.1147200I$ $b = 0.722696 - 0.604621I$	$0.0307983 - 0.0668754I$	$5.97468 - 0.20302I$
$u = -0.205648 + 1.005780I$ $a = -1.065570 + 0.155067I$ $b = 0.566243 - 0.700302I$	$0.30073 + 3.12728I$	$5.74339 - 3.05475I$
$u = -0.205648 - 1.005780I$ $a = -1.065570 - 0.155067I$ $b = 0.566243 + 0.700302I$	$0.30073 - 3.12728I$	$5.74339 + 3.05475I$
$u = -0.808673 + 0.138234I$ $a = 1.29598 + 0.61262I$ $b = 1.050550 - 0.092879I$	$-1.57428 + 4.12934I$	$1.75204 - 5.88893I$
$u = -0.808673 - 0.138234I$ $a = 1.29598 - 0.61262I$ $b = 1.050550 + 0.092879I$	$-1.57428 - 4.12934I$	$1.75204 + 5.88893I$
$u = 0.186789 + 1.179420I$ $a = 0.437334 + 0.307728I$ $b = -1.43772 + 0.15241I$	$-0.62020 - 1.71292I$	$7.11578 + 4.48405I$
$u = 0.186789 - 1.179420I$ $a = 0.437334 - 0.307728I$ $b = -1.43772 - 0.15241I$	$-0.62020 + 1.71292I$	$7.11578 - 4.48405I$
$u = -0.035830 + 1.196030I$ $a = 0.74364 + 1.35480I$ $b = -0.094716 + 0.338801I$	$1.54048 - 1.51605I$	$5.47077 + 1.56313I$
$u = -0.035830 - 1.196030I$ $a = 0.74364 - 1.35480I$ $b = -0.094716 - 0.338801I$	$1.54048 + 1.51605I$	$5.47077 - 1.56313I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.191440 + 0.333174I$ $a = 1.043410 - 0.369661I$ $b = 2.01038 + 0.71201I$	$-12.06790 - 6.30873I$	$2.13106 + 4.45047I$
$u = 1.191440 - 0.333174I$ $a = 1.043410 + 0.369661I$ $b = 2.01038 - 0.71201I$	$-12.06790 + 6.30873I$	$2.13106 - 4.45047I$
$u = -0.728989 + 0.094813I$ $a = -2.26028 + 0.66699I$ $b = -2.27756 + 0.23999I$	$-13.44440 + 0.57800I$	$0.020927 + 0.338279I$
$u = -0.728989 - 0.094813I$ $a = -2.26028 - 0.66699I$ $b = -2.27756 - 0.23999I$	$-13.44440 - 0.57800I$	$0.020927 - 0.338279I$
$u = 0.270004 + 1.252220I$ $a = 0.282766 - 1.337250I$ $b = 0.757575 - 0.249175I$	$5.78248 - 3.21327I$	$7.91783 + 2.84424I$
$u = 0.270004 - 1.252220I$ $a = 0.282766 + 1.337250I$ $b = 0.757575 + 0.249175I$	$5.78248 + 3.21327I$	$7.91783 - 2.84424I$
$u = -0.328477 + 1.291160I$ $a = 1.19013 - 2.17034I$ $b = -2.48972 - 0.49981I$	$-9.66385 + 3.20076I$	$5.89501 - 3.23003I$
$u = -0.328477 - 1.291160I$ $a = 1.19013 + 2.17034I$ $b = -2.48972 + 0.49981I$	$-9.66385 - 3.20076I$	$5.89501 + 3.23003I$
$u = 0.615140$ $a = 1.71995$ $b = 0.634685$	1.97433	3.38590
$u = -0.198749 + 0.555559I$ $a = 0.466569 - 0.230649I$ $b = -0.042075 + 0.321375I$	$0.293656 + 0.891269I$	$6.04844 - 7.62734I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.198749 - 0.555559I$ $a = 0.466569 + 0.230649I$ $b = -0.042075 - 0.321375I$	$0.293656 - 0.891269I$	$6.04844 + 7.62734I$
$u = 0.19095 + 1.40255I$ $a = -0.762581 + 0.804443I$ $b = 0.648853 - 0.396327I$	$7.52810 - 2.72251I$	$5.91943 + 2.93635I$
$u = 0.19095 - 1.40255I$ $a = -0.762581 - 0.804443I$ $b = 0.648853 + 0.396327I$	$7.52810 + 2.72251I$	$5.91943 - 2.93635I$
$u = -0.33162 + 1.39639I$ $a = 0.384147 - 0.722282I$ $b = -2.04211 + 0.03629I$	$-8.62803 + 4.45679I$	$4.27715 - 2.52282I$
$u = -0.33162 - 1.39639I$ $a = 0.384147 + 0.722282I$ $b = -2.04211 - 0.03629I$	$-8.62803 - 4.45679I$	$4.27715 + 2.52282I$
$u = 0.560762$ $a = -0.627330$ $b = 0.630030$	2.83334	-3.70100
$u = -0.39837 + 1.38695I$ $a = -0.00124 + 1.46170I$ $b = 1.46915 - 0.06976I$	$3.24411 + 8.61128I$	$5.93302 - 6.50406I$
$u = -0.39837 - 1.38695I$ $a = -0.00124 - 1.46170I$ $b = 1.46915 + 0.06976I$	$3.24411 - 8.61128I$	$5.93302 + 6.50406I$
$u = 0.456864 + 0.208287I$ $a = -0.90969 + 1.40386I$ $b = -1.084480 - 0.415889I$	$-3.49555 - 0.69535I$	$-2.34683 + 1.44862I$
$u = 0.456864 - 0.208287I$ $a = -0.90969 - 1.40386I$ $b = -1.084480 + 0.415889I$	$-3.49555 + 0.69535I$	$-2.34683 - 1.44862I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.87973 + 1.22637I$ $a = -0.139604 - 0.532893I$ $b = 1.63216 - 0.82120I$	$-9.52612 - 0.81474I$	$4.00000 + 0.I$
$u = 0.87973 - 1.22637I$ $a = -0.139604 + 0.532893I$ $b = 1.63216 + 0.82120I$	$-9.52612 + 0.81474I$	$4.00000 + 0.I$
$u = 0.05021 + 1.52644I$ $a = 0.17157 + 1.59718I$ $b = -0.18166 - 1.41300I$	$2.16967 - 2.20129I$	$4.00000 + 3.06497I$
$u = 0.05021 - 1.52644I$ $a = 0.17157 - 1.59718I$ $b = -0.18166 + 1.41300I$	$2.16967 + 2.20129I$	$4.00000 - 3.06497I$
$u = -0.12317 + 1.58705I$ $a = -0.40122 - 1.36947I$ $b = 0.37780 + 1.57073I$	$8.12130 + 2.40437I$	$4.00000 + 0.I$
$u = -0.12317 - 1.58705I$ $a = -0.40122 + 1.36947I$ $b = 0.37780 - 1.57073I$	$8.12130 - 2.40437I$	$4.00000 + 0.I$
$u = 0.48360 + 1.54293I$ $a = -0.14007 - 1.57905I$ $b = 2.28229 + 0.66578I$	$-6.11597 - 12.29010I$	0
$u = 0.48360 - 1.54293I$ $a = -0.14007 + 1.57905I$ $b = 2.28229 - 0.66578I$	$-6.11597 + 12.29010I$	0

II. $\boldsymbol{I_2^u = \langle -u^4 - 2u^2 + b,\ -2u^9 - 12u^7 + \cdots + a + 4,\ u^{10} + 6u^8 + \cdots - 4u + 1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 2u^9 + 12u^7 - u^6 + 26u^5 - 6u^4 + 25u^3 - 10u^2 + 11u - 4 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 2u^9 + 12u^7 - u^6 + 26u^5 - 5u^4 + 25u^3 - 8u^2 + 11u - 4 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 2u^9 + u^8 + 12u^7 + 4u^6 + 25u^5 + 3u^4 + 22u^3 - 3u^2 + 9u - 2 \\ u^3 + 2u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 2u^9 + 12u^7 - u^6 + 26u^5 - 5u^4 + 25u^3 - 8u^2 + 11u - 3 \\ u^6 + 4u^4 + 4u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -2u^9 - u^8 - 12u^7 - 4u^6 - 25u^5 - 3u^4 - 22u^3 + 4u^2 - 9u + 4 \\ -u^8 - 5u^6 - 7u^4 - 2u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 2u^9 + u^8 + 12u^7 + 4u^6 + 25u^5 + 3u^4 + 22u^3 - 3u^2 + 9u - 2 \\ u^5 + 4u^3 - u^2 + 4u - 1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u^9 + 6u^7 - u^6 + 13u^5 - 6u^4 + 13u^3 - 11u^2 + 7u - 6 \\ u^7 - u^6 + 5u^5 - 4u^4 + 8u^3 - 5u^2 + 4u - 2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -2u^8 + 3u^7 - 8u^6 + 13u^5 - 11u^4 + 19u^3 - 11u^2 + 11u - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{10} - 4u^9 + 4u^8 - 3u^7 + 11u^6 - 7u^5 - u^4 - 8u^3 + 5u^2 + 2u + 1$
c_2	$u^{10} - 2u^9 - u^8 + 3u^7 + 2u^5 - 2u^4 - 5u^3 + 2u^2 + 2u + 1$
c_3	$u^{10} - 3u^9 + 8u^8 - 12u^7 + 13u^6 - 11u^5 + 6u^4 - u^3 + u^2 - 2u + 1$
c_4, c_5	$u^{10} + 6u^8 - u^7 + 13u^6 - 5u^5 + 13u^4 - 8u^3 + 7u^2 - 4u + 1$
c_6	$u^{10} + 2u^9 - u^8 - 3u^7 - 2u^5 - 2u^4 + 5u^3 + 2u^2 - 2u + 1$
c_7, c_8	$u^{10} + 7u^8 - u^7 + 17u^6 - 5u^5 + 17u^4 - 8u^3 + 6u^2 - 4u + 1$
c_9	$u^{10} - 2u^9 + u^8 - u^7 + 6u^6 - 11u^5 + 13u^4 - 12u^3 + 8u^2 - 3u + 1$
c_{10}	$u^{10} + 6u^8 + u^7 + 13u^6 + 5u^5 + 13u^4 + 8u^3 + 7u^2 + 4u + 1$
c_{11}	$u^{10} + 7u^8 + u^7 + 17u^6 + 5u^5 + 17u^4 + 8u^3 + 6u^2 + 4u + 1$
c_{12}	$u^{10} + 3u^9 + \cdots + 6u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{10} - 8y^9 + \cdots + 6y + 1$
c_2, c_6	$y^{10} - 6y^9 + 13y^8 - 5y^7 - 24y^6 + 32y^5 + 10y^4 - 41y^3 + 20y^2 + 1$
c_3	$y^{10} + 7y^9 + 18y^8 + 10y^7 - 3y^6 + 17y^5 + 8y^4 - 7y^3 + 9y^2 - 2y + 1$
c_4, c_5, c_{10}	$y^{10} + 12y^9 + \cdots - 2y + 1$
c_7, c_8, c_{11}	$y^{10} + 14y^9 + \cdots - 4y + 1$
c_9	$y^{10} - 2y^9 + 9y^8 - 7y^7 + 8y^6 + 17y^5 - 3y^4 + 10y^3 + 18y^2 + 7y + 1$
c_{12}	$y^{10} + 25y^9 + \cdots + 2y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.203188 + 0.867061I$ $a = 0.493495 + 0.731043I$ $b = -1.040350 + 0.204005I$	$-1.57782 - 0.69065I$	$1.59727 + 0.69033I$
$u = 0.203188 - 0.867061I$ $a = 0.493495 - 0.731043I$ $b = -1.040350 - 0.204005I$	$-1.57782 + 0.69065I$	$1.59727 - 0.69033I$
$u = -0.518951 + 1.046120I$ $a = 0.16725 - 1.58982I$ $b = -2.14828 - 0.37991I$	$-10.93840 + 1.99907I$	$1.90479 - 0.88974I$
$u = -0.518951 - 1.046120I$ $a = 0.16725 + 1.58982I$ $b = -2.14828 + 0.37991I$	$-10.93840 - 1.99907I$	$1.90479 + 0.88974I$
$u = 0.09726 + 1.51614I$ $a = -0.226826 + 1.186790I$ $b = 0.575141 - 0.760414I$	$4.87853 - 4.08278I$	$5.39048 + 3.19814I$
$u = 0.09726 - 1.51614I$ $a = -0.226826 - 1.186790I$ $b = 0.575141 + 0.760414I$	$4.87853 + 4.08278I$	$5.39048 - 3.19814I$
$u = -0.15182 + 1.51661I$ $a = -0.58645 - 1.30038I$ $b = 0.418801 + 1.176140I$	$8.85979 + 2.29290I$	$14.4139 - 0.8018I$
$u = -0.15182 - 1.51661I$ $a = -0.58645 + 1.30038I$ $b = 0.418801 - 1.176140I$	$8.85979 - 2.29290I$	$14.4139 + 0.8018I$
$u = 0.370323 + 0.187881I$ $a = -0.84746 + 2.49473I$ $b = 0.194686 + 0.306649I$	$-1.22208 - 2.50161I$	$1.19353 + 1.66838I$
$u = 0.370323 - 0.187881I$ $a = -0.84746 - 2.49473I$ $b = 0.194686 - 0.306649I$	$-1.22208 + 2.50161I$	$1.19353 - 1.66838I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 3u^2 - u + 14$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_5 c_7, c_8, c_{10} c_{11}	$y^3 + 4y^2 + 4y - 1$
c_2, c_6	$y^3 - 3y^2 + 5y - 4$
c_3, c_9	$(y-1)^3$
c_{12}	$y^3 + y^2 + 13y - 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.22670 + 1.46771I$ $a = -0.77330 + 1.46771I$ $b = -0.22670 - 1.46771I$	3.28987	$7.46495 + 0.52866I$
$u = 0.22670 - 1.46771I$ $a = -0.77330 - 1.46771I$ $b = -0.22670 + 1.46771I$	3.28987	$7.46495 - 0.52866I$
$u = -0.453398$ $a = -1.45340$ $b = 0.453398$	3.28987	15.0700

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	(u^3+2u+1) $\cdot(u^{10}-4u^9+4u^8-3u^7+11u^6-7u^5-u^4-8u^3+5u^2+2u+1)$ $\cdot(u^{38}-5u^{37}+\cdots-5335u+599)$
c_2	$(u^3-u^2-u+2)(u^{10}-2u^9+\cdots+2u+1)$ $\cdot(u^{38}-4u^{37}+\cdots+538u-98)$
c_3	$(u+1)^3$ $\cdot(u^{10}-3u^9+8u^8-12u^7+13u^6-11u^5+6u^4-u^3+u^2-2u+1)$ $\cdot(u^{38}-u^{37}+\cdots-6836u+799)$
c_4, c_5	$(u^3+2u+1)(u^{10}+6u^8+\cdots-4u+1)$ $\cdot(u^{38}-u^{37}+\cdots-43u+31)$
c_6	$(u^3+u^2-u-2)(u^{10}+2u^9+\cdots-2u+1)$ $\cdot(u^{38}-4u^{37}+\cdots+538u-98)$
c_7, c_8	$(u^3+2u+1)(u^{10}+7u^8+\cdots-4u+1)$ $\cdot(u^{38}+u^{37}+\cdots-33u-1)$
c_9	$(u+1)^3$ $\cdot(u^{10}-2u^9+u^8-u^7+6u^6-11u^5+13u^4-12u^3+8u^2-3u+1)$ $\cdot(u^{38}+2u^{37}+\cdots+85u-51)$
c_{10}	$(u^3+2u-1)(u^{10}+6u^8+\cdots+4u+1)$ $\cdot(u^{38}-u^{37}+\cdots-43u+31)$
c_{11}	$(u^3+2u-1)(u^{10}+7u^8+\cdots+4u+1)$ $\cdot(u^{38}+u^{37}+\cdots-33u-1)$
c_{12}	$(u^3-3u^2+5u-2)(u^{10}+3u^9+\cdots+6u+1)$ $\cdot(u^{38}-u^{37}+\cdots-7672u-232)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^3+4y^2+4y-1)(y^{10}-8y^9+\cdots+6y+1)$ $\cdot(y^{38}-57y^{37}+\cdots+6455881y+358801)$
c_2, c_6	(y^3-3y^2+5y-4) $\cdot(y^{10}-6y^9+13y^8-5y^7-24y^6+32y^5+10y^4-41y^3+20y^2+1)$ $\cdot(y^{38}-18y^{37}+\cdots-108928y+9604)$
c_3	$(y-1)^3$ $\cdot(y^{10}+7y^9+18y^8+10y^7-3y^6+17y^5+8y^4-7y^3+9y^2-2y+1)$ $\cdot(y^{38}+51y^{37}+\cdots-5168514y+638401)$
c_4, c_5, c_{10}	$(y^3+4y^2+4y-1)(y^{10}+12y^9+\cdots-2y+1)$ $\cdot(y^{38}+35y^{37}+\cdots-1911y+961)$
c_7, c_8, c_{11}	$(y^3+4y^2+4y-1)(y^{10}+14y^9+\cdots-4y+1)$ $\cdot(y^{38}+53y^{37}+\cdots-1289y+1)$
c_9	$(y-1)^3$ $\cdot(y^{10}-2y^9+9y^8-7y^7+8y^6+17y^5-3y^4+10y^3+18y^2+7y+1)$ $\cdot(y^{38}-18y^{37}+\cdots-30685y+2601)$
c_{12}	$(y^3+y^2+13y-4)(y^{10}+25y^9+\cdots+2y+1)$ $\cdot(y^{38}+137y^{37}+\cdots-68527952y+53824)$