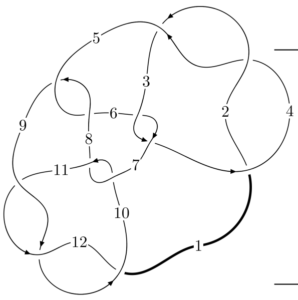
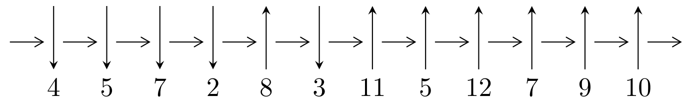
$12n_{0670}$ $(K12n_{0670})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 1.08226 \times 10^{53} u^{26} + 3.46651 \times 10^{53} u^{25} + \cdots + 6.35629 \times 10^{53} b - 9.30418 \times 10^{53},$$
$$1.28555 \times 10^{53} u^{26} + 3.81262 \times 10^{52} u^{25} + \cdots + 1.27126 \times 10^{54} a - 1.73709 \times 10^{55},\ u^{27} + 4u^{26} + \cdots - 36u -$$
$$I_2^u = \langle 2u^7 + u^6 - 3u^5 - 3u^4 + 4u^3 + 3u^2 + b - 2u - 4,\ 6u^7 + 2u^6 - 8u^5 - 7u^4 + 11u^3 + 5u^2 + a - 4u - 9,$$
$$u^8 + u^7 - u^6 - 2u^5 + u^4 + 2u^3 - 2u - 1\rangle$$
$$I_3^u = \langle b + 2u + 1,\ a - u + 3,\ u^2 - u - 1\rangle$$
$$I_4^u = \langle b - u,\ a,\ u^2 - u - 1\rangle$$

$$I_1^v = \langle a,\ -5v^2 + 7b - 49v - 11,\ v^3 + 10v^2 + 5v + 1\rangle$$

* 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. $\boldsymbol{I_1^u =}$
$\langle \mathbf{1.08\times10^{53}}\boldsymbol{u^{26}}\mathbf{+3.47\times10^{53}}\boldsymbol{u^{25}}\mathbf{+\cdots+6.36\times10^{53}}\boldsymbol{b}\mathbf{-9.30\times10^{53}},\ \mathbf{1.29\times10^{53}}\boldsymbol{u^{26}}\mathbf{+3.81\times10^{52}}\boldsymbol{u^{25}}\mathbf{+\cdots+1.27\times10^{54}}\boldsymbol{a}\mathbf{-1.74\times10^{55}},\ \boldsymbol{u^{27}}\mathbf{+4}\boldsymbol{u^{26}}\mathbf{+\cdots-36}\boldsymbol{u}\mathbf{-8}\rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.101124u^{26} - 0.0299909u^{25} + \cdots + 208.958u + 13.6643 \\ -0.170266u^{26} - 0.545367u^{25} + \cdots + 9.62422u + 1.46377 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -0.180542u^{26} - 0.294451u^{25} + \cdots + 212.007u + 15.1966 \\ -0.206040u^{26} - 0.663628u^{25} + \cdots + 10.9044u + 1.88945 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.426084u^{26} + 1.57401u^{25} + \cdots + 106.382u + 3.92285 \\ 0.102378u^{26} + 0.343812u^{25} + \cdots - 1.38646u - 1.36007 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.323706u^{26} + 1.23020u^{25} + \cdots + 107.769u + 5.28292 \\ 0.102378u^{26} + 0.343812u^{25} + \cdots - 1.38646u - 1.36007 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0171155u^{26} + 0.0283407u^{25} + \cdots - 26.6157u - 2.71004 \\ 0.0302735u^{26} + 0.0988551u^{25} + \cdots - 0.938445u - 0.463848 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0251997u^{26} - 0.0548227u^{25} + \cdots + 26.2467u + 2.85292 \\ -0.0188792u^{26} - 0.0620300u^{25} + \cdots + 1.82255u + 0.224933 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.336468u^{26} - 0.923526u^{25} + \cdots + 132.165u + 10.0199 \\ -0.251652u^{26} - 0.818179u^{25} + \cdots + 10.8630u + 2.53569 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0473890u^{26} + 0.127196u^{25} + \cdots - 27.5541u - 3.17389 \\ 0.00858260u^{26} + 0.0283575u^{25} + \cdots - 0.927413u - 0.0350346 \end{pmatrix}$$

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0379585u^{26} + 1.16314u^{25} + \cdots + 780.278u + 65.8410$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_4	$u^{27} - 12u^{26} + \cdots - 82u - 1$
c_3, c_6	$u^{27} + 4u^{26} + \cdots + 640u - 256$
c_5, c_8	$u^{27} + 3u^{26} + \cdots - 112u + 16$
c_7, c_{10}	$u^{27} - 4u^{26} + \cdots - 36u + 8$
c_9, c_{11}, c_{12}	$u^{27} + 7u^{26} + \cdots - 65u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$y^{27} - 46y^{26} + \cdots + 6314y - 1$
c_3, c_6	$y^{27} - 54y^{26} + \cdots + 5095424y - 65536$
c_5, c_8	$y^{27} + 25y^{26} + \cdots + 12928y - 256$
c_7, c_{10}	$y^{27} + 12y^{26} + \cdots + 7696y - 64$
c_9, c_{11}, c_{12}	$y^{27} - 15y^{26} + \cdots + 4023y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.598885 + 1.018170I$ $a = -0.527451 - 0.308767I$ $b = 0.147510 + 0.585443I$	$-2.46734 + 1.28188I$	$0.019660 - 0.966602I$
$u = 0.598885 - 1.018170I$ $a = -0.527451 + 0.308767I$ $b = 0.147510 - 0.585443I$	$-2.46734 - 1.28188I$	$0.019660 + 0.966602I$
$u = -0.975452 + 0.786268I$ $a = -0.196879 + 0.002027I$ $b = 0.073018 - 0.478334I$	$1.16826 - 5.86191I$	$6.68570 + 1.60407I$
$u = -0.975452 - 0.786268I$ $a = -0.196879 - 0.002027I$ $b = 0.073018 + 0.478334I$	$1.16826 + 5.86191I$	$6.68570 - 1.60407I$
$u = -0.538379 + 0.455019I$ $a = 1.62953 + 0.35861I$ $b = -0.061105 - 0.490914I$	$1.156740 + 0.801856I$	$6.71973 + 0.16728I$
$u = -0.538379 - 0.455019I$ $a = 1.62953 - 0.35861I$ $b = -0.061105 + 0.490914I$	$1.156740 - 0.801856I$	$6.71973 - 0.16728I$
$u = -0.702983 + 0.023598I$ $a = -2.18915 + 4.62670I$ $b = -0.99845 + 1.93414I$	$-0.834252 - 0.150815I$	$17.5464 + 6.6365I$
$u = -0.702983 - 0.023598I$ $a = -2.18915 - 4.62670I$ $b = -0.99845 - 1.93414I$	$-0.834252 + 0.150815I$	$17.5464 - 6.6365I$
$u = 0.442597 + 0.499853I$ $a = -0.078287 - 0.292577I$ $b = -0.33969 - 1.38997I$	$4.69512 - 2.40532I$	$3.41247 - 6.32084I$
$u = 0.442597 - 0.499853I$ $a = -0.078287 + 0.292577I$ $b = -0.33969 + 1.38997I$	$4.69512 + 2.40532I$	$3.41247 + 6.32084I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.610551$ $a=\ \ 0.710713$ $b=\ \ 0.376982$	0.859867	11.9670
$u=\ \ 0.594482$ $a=-4.50707$ $b=\ \ 0.0513464$	-7.81649	57.8300
$u=\ \ 1.58256$ $a=\ \ 1.18182$ $b=\ \ 3.57318$	7.98804	43.0640
$u=\ \ 0.34038+1.67519I$ $a=\ \ 1.057830+0.148663I$ $b=-0.340400+0.098336I$	$-13.16990+3.53439I$	$0.-2.09406I$
$u=\ \ 0.34038-1.67519I$ $a=\ \ 1.057830-0.148663I$ $b=-0.340400-0.098336I$	$-13.16990-3.53439I$	$0.+2.09406I$
$u=-0.60820+1.69659I$ $a=\ \ 0.877793-0.221512I$ $b=-0.35535-1.77081I$	$-6.34499-6.08931I$	$0.+3.73020I$
$u=-0.60820-1.69659I$ $a=\ \ 0.877793+0.221512I$ $b=-0.35535+1.77081I$	$-6.34499+6.08931I$	$0.-3.73020I$
$u=\ \ 0.03133+1.80621I$ $a=\ \ 0.524823+0.076099I$ $b=-0.25035+1.73182I$	$-7.44159-1.29405I$	$-1.37770+1.27497I$
$u=\ \ 0.03133-1.80621I$ $a=\ \ 0.524823-0.076099I$ $b=-0.25035-1.73182I$	$-7.44159+1.29405I$	$-1.37770-1.27497I$
$u=\ \ 0.142980$ $a=\ \ 49.1336$ $b=\ \ 0.408460$	0.561362	203.500

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.125648$ $a = -6.99415$ $b = -0.661597$	-1.12664	-9.59770
$u = -1.42516 + 1.34942I$ $a = -0.835437 + 0.737623I$ $b = 0.57720 + 2.23959I$	$-15.7574 - 13.5083I$	0
$u = -1.42516 - 1.34942I$ $a = -0.835437 - 0.737623I$ $b = 0.57720 - 2.23959I$	$-15.7574 + 13.5083I$	0
$u = 1.66937 + 1.50035I$ $a = -0.579428 - 0.676345I$ $b = 0.28102 - 2.41058I$	$18.5782 + 5.9421I$	0
$u = 1.66937 - 1.50035I$ $a = -0.579428 + 0.676345I$ $b = 0.28102 + 2.41058I$	$18.5782 - 5.9421I$	0
$u = -1.62430 + 1.65382I$ $a = -0.445794 + 0.495251I$ $b = -0.10758 + 2.58327I$	$-16.0044 + 2.3695I$	0
$u = -1.62430 - 1.65382I$ $a = -0.445794 - 0.495251I$ $b = -0.10758 - 2.58327I$	$-16.0044 - 2.3695I$	0

II. $\boldsymbol{I_2^u = \langle 2u^7 + u^6 - 3u^5 - 3u^4 + 4u^3 + 3u^2 + b - 2u - 4,\ 6u^7 + 2u^6 + \cdots + a - 9,\ u^8 + u^7 - u^6 - 2u^5 + u^4 + 2u^3 - 2u - 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -6u^7 - 2u^6 + 8u^5 + 7u^4 - 11u^3 - 5u^2 + 4u + 9 \\ -2u^7 - u^6 + 3u^5 + 3u^4 - 4u^3 - 3u^2 + 2u + 4 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -6u^7 - 2u^6 + 8u^5 + 7u^4 - 11u^3 - 5u^2 + 4u + 9 \\ -2u^7 - u^6 + 3u^5 + 3u^4 - 4u^3 - 3u^2 + 2u + 4 \end{pmatrix}$$

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

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

$$a_9 = \begin{pmatrix} u^4 - u^2 + 1 \\ -u^4 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u^6 - u^4 + 2u^2 - 1 \\ -u^7 - u^6 + 2u^5 + u^4 - 2u^3 - 2u^2 + 2u + 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -6u^7 - 2u^6 + 8u^5 + 7u^4 - 11u^3 - 4u^2 + 4u + 8 \\ -2u^7 - u^6 + 3u^5 + 3u^4 - 4u^3 - 4u^2 + 2u + 4 \end{pmatrix}$$

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

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -44u^7 - 15u^6 + 58u^5 + 53u^4 - 78u^3 - 42u^2 + 28u + 73$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^8$
c_3, c_6	y^8
c_5, c_8	$y^8+5y^7+11y^6+6y^5-17y^4-34y^3-22y^2-4y+1$
c_7, c_{10}	$y^8-3y^7+7y^6-10y^5+11y^4-10y^3+6y^2-4y+1$
c_9, c_{11}, c_{12}	$y^8-7y^7+19y^6-22y^5+3y^4+14y^3-6y^2-4y+1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.570868+0.730671I$ $a=-1.194470-0.635084I$ $b=-0.281371+1.128550I$	$-0.604279+1.131230I$	$0.744211+0.553382I$
$u=-0.570868-0.730671I$ $a=-1.194470+0.635084I$ $b=-0.281371-1.128550I$	$-0.604279-1.131230I$	$0.744211-0.553382I$
$u=\ \ 0.855237+0.665892I$ $a=-0.637416-0.344390I$ $b=\ \ 0.208670-0.825203I$	$-3.80435+2.57849I$	$-2.39106-4.72239I$
$u=\ \ 0.855237-0.665892I$ $a=-0.637416+0.344390I$ $b=\ \ 0.208670+0.825203I$	$-3.80435-2.57849I$	$-2.39106+4.72239I$
$u=\ \ 1.09818$ $a=\ \ 0.687555$ $b=\ \ 0.829189$	4.85780	8.45210
$u=-1.031810+0.655470I$ $a=-0.286111+0.344558I$ $b=\ \ 0.284386+0.605794I$	$0.73474-6.44354I$	$0.47538+9.99765I$
$u=-1.031810-0.655470I$ $a=-0.286111-0.344558I$ $b=\ \ 0.284386-0.605794I$	$0.73474+6.44354I$	$0.47538-9.99765I$
$u=-0.603304$ $a=\ \ 7.54843$ $b=\ \ 2.74744$	-0.799899	60.8910

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -45$

(iv) u-Polynomials at the component

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

(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_9, c_{10}, c_{11} c_{12}	$y^2 - 3y + 1$
c_5, c_8	y^2

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.618034$ $a = -3.61803$ $b = 0.236068$	-7.89568	-45.0000
$u = 1.61803$ $a = -1.38197$ $b = -4.23607$	7.89568	-45.0000

IV. $I_4^u = \langle b - u,\ a,\ u^2 - u - 1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 0$

(iv) u-Polynomials at the component

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

(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_9, c_{10}, c_{11} c_{12}	$y^2 - 3y + 1$
c_5, c_8	y^2

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.618034$ $a = 0$ $b = -0.618034$	0	0
$u = 1.61803$ $a = 0$ $b = 1.61803$	0	0

V. $\boldsymbol{I_1^v = \langle a,\ -5v^2 + 7b - 49v - 11,\ v^3 + 10v^2 + 5v + 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0 \\ \frac{5}{7}v^2 + 7v + \frac{11}{7} \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -\frac{5}{7}v^2 - 7v - \frac{11}{7} \\ \frac{5}{7}v^2 + 7v + \frac{11}{7} \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ \frac{2}{7}v^2 + 3v + \frac{17}{7} \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -\frac{2}{7}v^2 - 3v - \frac{10}{7} \\ \frac{2}{7}v^2 + 3v + \frac{17}{7} \end{pmatrix}$$

$$a_9 = \begin{pmatrix} \frac{5}{7}v^2 + 7v + \frac{25}{7} \\ -v^2 - 10v - 5 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -\frac{5}{7}v^2 - 6v - \frac{25}{7} \\ v^2 + 10v + 5 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1 \\ \frac{2}{7}v^2 + 3v + \frac{17}{7} \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -\frac{5}{7}v^2 - 7v - \frac{25}{7} \\ v^2 + 10v + 5 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{54}{7}v^2 - 65v - \frac{95}{7}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$v = -0.258045 + 0.197115I$ $a = 0$ $b = -0.215080 + 1.307140I$	$4.66906 + 2.82812I$	$2.98758 - 12.02771I$
$v = -0.258045 - 0.197115I$ $a = 0$ $b = -0.215080 - 1.307140I$	$4.66906 - 2.82812I$	$2.98758 + 12.02771I$
$v = -9.48391$ $a = 0$ $b = -0.569840$	0.531480	-90.9750

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_2	$((u-1)^8)(u^2+u-1)^2(u^3+u^2-1)(u^{27}-12u^{26}+\cdots-82u-1)$
c_3	$u^8(u^2+u-1)^2(u^3-u^2+2u-1)(u^{27}+4u^{26}+\cdots+640u-256)$
c_4	$((u+1)^8)(u^2-u-1)^2(u^3-u^2+1)(u^{27}-12u^{26}+\cdots-82u-1)$
c_5	$u^4(u^3+3u^2+2u-1)$ $\cdot(u^8+3u^7+7u^6+10u^5+11u^4+10u^3+6u^2+4u+1)$ $\cdot(u^{27}+3u^{26}+\cdots-112u+16)$
c_6	$u^8(u^2-u-1)^2(u^3+u^2+2u+1)(u^{27}+4u^{26}+\cdots+640u-256)$
c_7	$u^3(u^2-u-1)^2(u^8+u^7-u^6-2u^5+u^4+2u^3-2u-1)$ $\cdot(u^{27}-4u^{26}+\cdots-36u+8)$
c_8	$u^4(u^3-3u^2+2u+1)$ $\cdot(u^8-3u^7+7u^6-10u^5+11u^4-10u^3+6u^2-4u+1)$ $\cdot(u^{27}+3u^{26}+\cdots-112u+16)$
c_9	$(u+1)^3(u^2-u-1)^2(u^8-u^7-3u^6+2u^5+3u^4-2u-1)$ $\cdot(u^{27}+7u^{26}+\cdots-65u+1)$
c_{10}	$u^3(u^2+u-1)^2(u^8-u^7-u^6+2u^5+u^4-2u^3+2u-1)$ $\cdot(u^{27}-4u^{26}+\cdots-36u+8)$
c_{11}, c_{12}	$(u-1)^3(u^2+u-1)^2(u^8+u^7-3u^6-2u^5+3u^4+2u-1)$ $\cdot(u^{27}+7u^{26}+\cdots-65u+1)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^8(y^2-3y+1)^2(y^3-y^2+2y-1)$ $\cdot\,(y^{27}-46y^{26}+\cdots+6314y-1)$
c_3, c_6	$y^8(y^2-3y+1)^2(y^3+3y^2+2y-1)$ $\cdot\,(y^{27}-54y^{26}+\cdots+5095424y-65536)$
c_5, c_8	$y^4(y^3-5y^2+10y-1)$ $\cdot\,(y^8+5y^7+11y^6+6y^5-17y^4-34y^3-22y^2-4y+1)$ $\cdot\,(y^{27}+25y^{26}+\cdots+12928y-256)$
c_7, c_{10}	$y^3(y^2-3y+1)^2(y^8-3y^7+\cdots-4y+1)$ $\cdot\,(y^{27}+12y^{26}+\cdots+7696y-64)$
c_9, c_{11}, c_{12}	$(y-1)^3(y^2-3y+1)^2$ $\cdot\,(y^8-7y^7+19y^6-22y^5+3y^4+14y^3-6y^2-4y+1)$ $\cdot\,(y^{27}-15y^{26}+\cdots+4023y-1)$