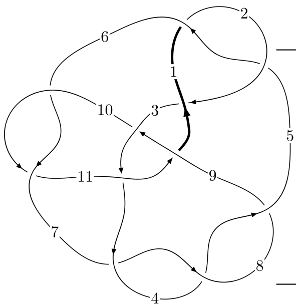
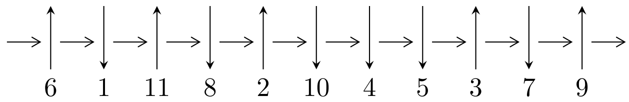
$11a_{163}$ $(K11a_{163})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 3.66420 \times 10^{64} u^{71} - 1.34364 \times 10^{65} u^{70} + \cdots + 5.98806 \times 10^{65} b + 5.69300 \times 10^{65}, \\ & -1.86215 \times 10^{65} u^{71} + 7.77862 \times 10^{65} u^{70} + \cdots + 5.98806 \times 10^{65} a - 1.33999 \times 10^{65},\ u^{72} + 17u^{70} + \cdots + u - \\ I_2^u = \langle & 2u^{12} + u^{11} + 6u^{10} + 3u^9 + 11u^8 + 7u^7 + 7u^6 + 10u^5 + 8u^3 - 3u^2 + b + 2u, \\ & u^{12} + u^{11} + 3u^{10} + 2u^9 + 4u^8 + 2u^7 - 4u^4 - 2u^3 - 3u^2 + a, \\ & u^{13} + u^{12} + 4u^{11} + 3u^{10} + 8u^9 + 6u^8 + 8u^7 + 7u^6 + 3u^5 + 6u^4 - u^3 + 3u^2 - u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 85 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.

$\boldsymbol{I_1^u = \langle 3.66\times 10^{64}u^{71} - 1.34\times 10^{65}u^{70} + \cdots + 5.99\times 10^{65}b + 5.69\times 10^{65},\ -1.86\times 10^{65}u^{71} + 7.78\times 10^{65}u^{70} + \cdots + 5.99\times 10^{65}a - 1.34\times 10^{65},\ u^{72} + 17u^{70} + \cdots + u + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.310978u^{71} - 1.29902u^{70} + \cdots - 3.70836u + 0.223776 \\ -0.0611917u^{71} + 0.224387u^{70} + \cdots + 1.02932u - 0.950725 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.0969772u^{71} - 1.15579u^{70} + \cdots - 3.31741u + 0.426345 \\ -0.254667u^{71} - 0.194746u^{70} + \cdots + 0.186158u - 1.47703 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.249786u^{71} - 1.07463u^{70} + \cdots - 2.67904u - 0.726949 \\ -0.0611917u^{71} + 0.224387u^{70} + \cdots + 1.02932u - 0.950725 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -2.35209u^{71} - 2.74506u^{70} + \cdots - 5.81147u + 0.452584 \\ -0.873645u^{71} - 0.690474u^{70} + \cdots + 0.140283u - 2.05357 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.518603u^{71} + 1.42755u^{70} + \cdots + 7.61883u + 0.135936 \\ 0.614017u^{71} - 0.318119u^{70} + \cdots - 1.29823u + 1.23094 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1.75192u^{71} - 0.223371u^{70} + \cdots - 10.3144u + 0.548362 \\ -1.06712u^{71} + 0.982309u^{70} + \cdots + 4.11161u + 1.60445 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1.75192u^{71} - 0.223371u^{70} + \cdots - 10.3144u + 0.548362 \\ -1.06712u^{71} + 0.982309u^{70} + \cdots + 4.11161u + 1.60445 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.46166u^{71} - 1.65225u^{70} + \cdots - 4.80947u - 8.48974$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{72} + 17u^{70} + \cdots + u + 1$
c_2	$u^{72} + 34u^{71} + \cdots + 11u + 1$
c_3	$u^{72} + 6u^{71} + \cdots + 50529u + 18761$
c_4, c_7, c_8	$u^{72} + 2u^{71} + \cdots + 17u - 1$
c_6, c_{10}	$u^{72} - u^{71} + \cdots + 704u + 121$
c_9	$u^{72} - 2u^{71} + \cdots - 25u - 1$
c_{11}	$u^{72} + 12u^{71} + \cdots - 916u - 88$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{72} + 34y^{71} + \cdots + 11y + 1$
c_2	$y^{72} + 14y^{71} + \cdots + 87y + 1$
c_3	$y^{72} + 28y^{71} + \cdots + 9764167099y + 351975121$
c_4, c_7, c_8	$y^{72} - 76y^{71} + \cdots - 13y + 1$
c_6, c_{10}	$y^{72} - 59y^{71} + \cdots - 471900y + 14641$
c_9	$y^{72} + 4y^{71} + \cdots - 33y + 1$
c_{11}	$y^{72} + 8y^{71} + \cdots + 92336y + 7744$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.840708+0.557697I$ $a=-0.880577-0.427963I$ $b=\ \ 1.343390-0.024122I$	$-2.78766-0.58394I$	$-2.05211+2.44149I$
$u=-0.840708-0.557697I$ $a=-0.880577+0.427963I$ $b=\ \ 1.343390+0.024122I$	$-2.78766+0.58394I$	$-2.05211-2.44149I$
$u=\ \ 0.950154+0.340310I$ $a=\ \ 0.730739+0.652349I$ $b=-1.54739-0.27859I$	$-7.89489-10.18180I$	$-4.39970+5.17085I$
$u=\ \ 0.950154-0.340310I$ $a=\ \ 0.730739-0.652349I$ $b=-1.54739+0.27859I$	$-7.89489+10.18180I$	$-4.39970-5.17085I$
$u=-0.341711+0.959879I$ $a=-0.96938+2.00953I$ $b=-0.220351+0.064200I$	$-4.43635-1.24068I$	$-13.95090+0.I$
$u=-0.341711-0.959879I$ $a=-0.96938-2.00953I$ $b=-0.220351-0.064200I$	$-4.43635+1.24068I$	$-13.95090+0.I$
$u=\ \ 0.314455+0.987227I$ $a=-1.18996-1.25711I$ $b=-0.240890+1.025020I$	$-4.69737+1.04071I$	$-11.41192+0.I$
$u=\ \ 0.314455-0.987227I$ $a=-1.18996+1.25711I$ $b=-0.240890-1.025020I$	$-4.69737-1.04071I$	$-11.41192+0.I$
$u=\ \ 0.775035+0.705599I$ $a=\ \ 0.106869+0.795488I$ $b=\ \ 0.140516-0.628949I$	$0.45501+2.74412I$	$0.-6.58454I$
$u=\ \ 0.775035-0.705599I$ $a=\ \ 0.106869-0.795488I$ $b=\ \ 0.140516+0.628949I$	$0.45501-2.74412I$	$0.+6.58454I$

Solutions to I^u_1	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.05938$ $a=\ \ 0.181417$ $b=-1.41763$	-3.29623	-2.05430
$u=\ \ 0.474907+0.952227I$ $a=-0.633361-0.443998I$ $b=\ \ 0.748919+0.467243I$	$-0.15843+2.64508I$	0
$u=\ \ 0.474907-0.952227I$ $a=-0.633361+0.443998I$ $b=\ \ 0.748919-0.467243I$	$-0.15843-2.64508I$	0
$u=\ \ 0.541899+0.922731I$ $a=\ \ 0.420914+0.880805I$ $b=\ \ 0.174435-0.624288I$	$0.03676+2.24980I$	0
$u=\ \ 0.541899-0.922731I$ $a=\ \ 0.420914-0.880805I$ $b=\ \ 0.174435+0.624288I$	$0.03676-2.24980I$	0
$u=-0.834732+0.404612I$ $a=-0.539302+1.118290I$ $b=\ \ 0.549489-0.813801I$	$-1.04725+6.18742I$	$-1.76655-5.50914I$
$u=-0.834732-0.404612I$ $a=-0.539302-1.118290I$ $b=\ \ 0.549489+0.813801I$	$-1.04725-6.18742I$	$-1.76655+5.50914I$
$u=\ \ 0.794162+0.453233I$ $a=-1.084850-0.732074I$ $b=\ \ 1.44309+0.14451I$	$-3.22516-3.95142I$	$-2.96229+3.51289I$
$u=\ \ 0.794162-0.453233I$ $a=-1.084850+0.732074I$ $b=\ \ 1.44309-0.14451I$	$-3.22516+3.95142I$	$-2.96229-3.51289I$
$u=-0.005532+1.088180I$ $a=-1.073720+0.449198I$ $b=-1.53636-0.04905I$	$-8.67044-2.20266I$	$-8.24814+0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.005532 - 1.088180I$ $a = -1.073720 - 0.449198I$ $b = -1.53636 + 0.04905I$	$-8.67044 + 2.20266I$	$-8.24814 + 0.I$
$u = 0.426028 + 1.029620I$ $a = 2.09550 + 0.82862I$ $b = 1.56968 - 0.04690I$	$-10.60600 + 5.33661I$	0
$u = 0.426028 - 1.029620I$ $a = 2.09550 - 0.82862I$ $b = 1.56968 + 0.04690I$	$-10.60600 - 5.33661I$	0
$u = -0.880421$ $a = -0.281963$ $b = 1.12632$	-1.79480	-8.89990
$u = -0.421636 + 1.054610I$ $a = 0.447812 - 0.783280I$ $b = 1.69289 - 0.25084I$	$-11.08040 - 0.40194I$	0
$u = -0.421636 - 1.054610I$ $a = 0.447812 + 0.783280I$ $b = 1.69289 + 0.25084I$	$-11.08040 + 0.40194I$	0
$u = 0.470200 + 1.042550I$ $a = 0.79513 + 2.99296I$ $b = 1.47270 - 0.0001I$	$-10.28460 + 1.13066I$	0
$u = 0.470200 - 1.042550I$ $a = 0.79513 - 2.99296I$ $b = 1.47270 + 0.0001I$	$-10.28460 - 1.13066I$	0
$u = -0.533946 + 1.013710I$ $a = -0.879687 + 0.301042I$ $b = -0.662168 - 0.098832I$	$-3.06053 - 4.69031I$	0
$u = -0.533946 - 1.013710I$ $a = -0.879687 - 0.301042I$ $b = -0.662168 + 0.098832I$	$-3.06053 + 4.69031I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.208920 + 0.825464I$ $a = 0.353262 + 0.439079I$ $b = 0.594004 - 0.357212I$	$-1.46471 + 0.85730I$	$-6.08976 - 4.46736I$
$u = -0.208920 - 0.825464I$ $a = 0.353262 - 0.439079I$ $b = 0.594004 + 0.357212I$	$-1.46471 - 0.85730I$	$-6.08976 + 4.46736I$
$u = 0.442925 + 0.726814I$ $a = -0.30006 - 2.18686I$ $b = -0.947495 + 0.274305I$	$0.609165 + 1.192600I$	$-2.86974 - 6.15662I$
$u = 0.442925 - 0.726814I$ $a = -0.30006 + 2.18686I$ $b = -0.947495 - 0.274305I$	$0.609165 - 1.192600I$	$-2.86974 + 6.15662I$
$u = -0.462289 + 1.065050I$ $a = 0.35283 - 2.29105I$ $b = 1.57534 + 0.38822I$	$-10.78700 - 6.40801I$	0
$u = -0.462289 - 1.065050I$ $a = 0.35283 + 2.29105I$ $b = 1.57534 - 0.38822I$	$-10.78700 + 6.40801I$	0
$u = -0.651335 + 0.521113I$ $a = 0.60688 - 1.32770I$ $b = -0.286712 + 0.512099I$	$2.41607 + 1.66211I$	$3.86075 - 3.01699I$
$u = -0.651335 - 0.521113I$ $a = 0.60688 + 1.32770I$ $b = -0.286712 - 0.512099I$	$2.41607 - 1.66211I$	$3.86075 + 3.01699I$
$u = -0.575499 + 1.031320I$ $a = 0.47397 - 1.46431I$ $b = 0.371678 + 0.605414I$	$0.91167 - 6.46667I$	0
$u = -0.575499 - 1.031320I$ $a = 0.47397 + 1.46431I$ $b = 0.371678 - 0.605414I$	$0.91167 + 6.46667I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.550811 + 1.056740I$ $a = 0.747495 + 0.338296I$ $b = -0.639979 - 1.016950I$	$-2.99967 + 5.33296I$	0
$u = 0.550811 - 1.056740I$ $a = 0.747495 - 0.338296I$ $b = -0.639979 + 1.016950I$	$-2.99967 - 5.33296I$	0
$u = -0.086155 + 1.193610I$ $a = -0.013978 + 0.141660I$ $b = -0.653821 + 0.551694I$	$-6.57891 + 3.67515I$	0
$u = -0.086155 - 1.193610I$ $a = -0.013978 - 0.141660I$ $b = -0.653821 - 0.551694I$	$-6.57891 - 3.67515I$	0
$u = 0.614768 + 0.453497I$ $a = 0.21295 + 1.65927I$ $b = 0.649805 - 0.820980I$	$-1.24059 - 0.70092I$	$-3.96458 + 1.25636I$
$u = 0.614768 - 0.453497I$ $a = 0.21295 - 1.65927I$ $b = 0.649805 + 0.820980I$	$-1.24059 + 0.70092I$	$-3.96458 - 1.25636I$
$u = 0.613054 + 1.092110I$ $a = -0.09290 - 2.30276I$ $b = -1.47613 + 0.18050I$	$-5.13451 + 9.23572I$	0
$u = 0.613054 - 1.092110I$ $a = -0.09290 + 2.30276I$ $b = -1.47613 - 0.18050I$	$-5.13451 - 9.23572I$	0
$u = -0.614621 + 1.121980I$ $a = -0.68974 + 1.30969I$ $b = -0.638676 - 0.884132I$	$-3.19452 - 11.57250I$	0
$u = -0.614621 - 1.121980I$ $a = -0.68974 - 1.30969I$ $b = -0.638676 + 0.884132I$	$-3.19452 + 11.57250I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.681999 + 0.181568I$ $a = 0.673913 - 0.420450I$ $b = -0.081091 + 0.148188I$	$1.48009 + 0.06732I$	$8.50693 + 1.19475I$
$u = 0.681999 - 0.181568I$ $a = 0.673913 + 0.420450I$ $b = -0.081091 - 0.148188I$	$1.48009 - 0.06732I$	$8.50693 - 1.19475I$
$u = -0.838953 + 0.988789I$ $a = 0.222398 + 0.901799I$ $b = -1.346560 - 0.145983I$	$-4.06336 - 5.47241I$	0
$u = -0.838953 - 0.988789I$ $a = 0.222398 - 0.901799I$ $b = -1.346560 + 0.145983I$	$-4.06336 + 5.47241I$	0
$u = 0.079295 + 0.696769I$ $a = -1.44779 + 1.05434I$ $b = -1.58629 - 0.11135I$	$-8.96742 - 2.37559I$	$-5.52309 + 3.97031I$
$u = 0.079295 - 0.696769I$ $a = -1.44779 - 1.05434I$ $b = -1.58629 + 0.11135I$	$-8.96742 + 2.37559I$	$-5.52309 - 3.97031I$
$u = -0.609332 + 1.155210I$ $a = -0.38230 + 1.37330I$ $b = -1.360490 - 0.234606I$	$-4.80243 - 5.41014I$	0
$u = -0.609332 - 1.155210I$ $a = -0.38230 - 1.37330I$ $b = -1.360490 + 0.234606I$	$-4.80243 + 5.41014I$	0
$u = 0.600309 + 1.184400I$ $a = -0.265300 - 0.552477I$ $b = -0.248151 + 0.167852I$	$-1.42281 + 5.04884I$	0
$u = 0.600309 - 1.184400I$ $a = -0.265300 + 0.552477I$ $b = -0.248151 - 0.167852I$	$-1.42281 - 5.04884I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.630641 + 1.185250I$ $a = 0.45048 + 1.91943I$ $b = 1.58800 - 0.29668I$	$-10.4703 + 15.9193I$	0
$u = 0.630641 - 1.185250I$ $a = 0.45048 - 1.91943I$ $b = 1.58800 + 0.29668I$	$-10.4703 - 15.9193I$	0
$u = 0.157141 + 1.357400I$ $a = 0.921605 + 0.073306I$ $b = 1.55044 + 0.19302I$	$-13.8147 - 6.4968I$	0
$u = 0.157141 - 1.357400I$ $a = 0.921605 - 0.073306I$ $b = 1.55044 - 0.19302I$	$-13.8147 + 6.4968I$	0
$u = -0.482865 + 0.381048I$ $a = 0.522791 + 0.286679I$ $b = 0.647093 - 0.330038I$	$-1.50033 + 0.49934I$	$-4.97310 - 1.55605I$
$u = -0.482865 - 0.381048I$ $a = 0.522791 - 0.286679I$ $b = 0.647093 + 0.330038I$	$-1.50033 - 0.49934I$	$-4.97310 + 1.55605I$
$u = -0.59705 + 1.31039I$ $a = 0.650728 - 1.145870I$ $b = 1.46461 + 0.05246I$	$-7.22620 - 5.83293I$	0
$u = -0.59705 - 1.31039I$ $a = 0.650728 + 1.145870I$ $b = 1.46461 - 0.05246I$	$-7.22620 + 5.83293I$	0
$u = 0.293343 + 0.413513I$ $a = 2.10950 + 1.82789I$ $b = -1.44649 + 0.12482I$	$-8.45650 + 2.58799I$	$-6.38429 - 2.67811I$
$u = 0.293343 - 0.413513I$ $a = 2.10950 - 1.82789I$ $b = -1.44649 - 0.12482I$	$-8.45650 - 2.58799I$	$-6.38429 + 2.67811I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.335948 + 0.212346I$ $a = \quad 3.09741 - 1.06498I$ $b = -1.51139 + 0.23154I$	$-8.60610 + 2.68144I$	$-5.49009 - 1.95050I$
$u = -0.335948 - 0.212346I$ $a = \quad 3.09741 + 1.06498I$ $b = -1.51139 - 0.23154I$	$-8.60610 - 2.68144I$	$-5.49009 + 1.95050I$

II.

$$\boldsymbol{I_2^u = \langle 2u^{12}+u^{11}+\cdots+b+2u,\ u^{12}+u^{11}+\cdots-3u^2+a,\ u^{13}+u^{12}+\cdots-u+1\rangle}$$

(i) Arc colorings

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

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

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

$$a_1 = \begin{pmatrix} -u \\ u^3+u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^3 \\ u^5+u^3+u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^{12}-u^{11}-3u^{10}-2u^9-4u^8-2u^7+4u^4+2u^3+3u^2 \\ -2u^{12}-u^{11}-6u^{10}-3u^9-11u^8-7u^7-7u^6-10u^5-8u^3+3u^2-2u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{12}-u^{11}-3u^{10}-3u^9-5u^8-5u^7-2u^6-4u^5+u^4+u^3+u^2+u-1 \\ -2u^{12}-u^{11}-6u^{10}-3u^9-11u^8-7u^7-7u^6-10u^5-7u^3+3u^2-u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -3u^{12}-2u^{11}+\cdots+6u^2-2u \\ -2u^{12}-u^{11}-6u^{10}-3u^9-11u^8-7u^7-7u^6-10u^5-8u^3+3u^2-2u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^{12}+u^{11}+2u^{10}+2u^9+2u^8+3u^7-2u^6+u^5-2u^4-3u^3+u^2-2u+1 \\ -u^{12}-u^{11}-3u^{10}-2u^9-5u^8-4u^7-3u^6-3u^5-3u^3+u^2-1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2u^{12}+4u^{10}-u^9+6u^8-u^6+4u^5-4u^4+6u^3-3u^2+2u \\ 3u^{12}+2u^{11}+\cdots+2u+1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 3u^{12}+2u^{11}+\cdots-3u^2+4u \\ u^{12}+u^{11}+3u^{10}+3u^9+5u^8+6u^7+3u^6+6u^5+u^4+3u^3+2u^2-u+2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 3u^{12}+2u^{11}+\cdots-3u^2+4u \\ u^{12}+u^{11}+3u^{10}+3u^9+5u^8+6u^7+3u^6+6u^5+u^4+3u^3+2u^2-u+2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -6u^{12}-6u^{11}-20u^{10}-13u^9-33u^8-24u^7-21u^6-22u^5+6u^4-20u^3+10u^2-5u-3$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{13} + 7y^{12} + \cdots - 5y - 1$
c_2	$y^{13} + 3y^{12} + \cdots - 13y - 1$
c_3	$y^{13} - 3y^{12} + \cdots - y - 1$
c_4, c_7, c_8	$y^{13} - 15y^{12} + \cdots + 3y - 1$
c_6, c_{10}	$y^{13} - 14y^{12} + \cdots + 14y - 1$
c_9	$y^{13} + y^{12} + \cdots + 3y - 1$
c_{11}	$y^{13} + y^{12} + \cdots + 3y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.349870 + 0.909420I$ $a = -1.41921 - 1.69350I$ $b = -0.074648 + 0.625560I$	$-3.76256 + 1.44897I$	$-0.77634 - 5.07895I$
$u = 0.349870 - 0.909420I$ $a = -1.41921 + 1.69350I$ $b = -0.074648 - 0.625560I$	$-3.76256 - 1.44897I$	$-0.77634 + 5.07895I$
$u = -1.08055$ $a = -0.243893$ $b = 1.22413$	-1.28306	7.99490
$u = -0.345453 + 1.027120I$ $a = 1.76185 - 1.53952I$ $b = 1.57855 + 0.11169I$	$-10.26050 - 4.15031I$	$-8.69293 + 2.72489I$
$u = -0.345453 - 1.027120I$ $a = 1.76185 + 1.53952I$ $b = 1.57855 - 0.11169I$	$-10.26050 + 4.15031I$	$-8.69293 - 2.72489I$
$u = -0.272707 + 0.834669I$ $a = 0.072435 - 0.706115I$ $b = -1.55282 + 0.17586I$	$-9.45221 + 1.59908I$	$-10.36413 + 2.46917I$
$u = -0.272707 - 0.834669I$ $a = 0.072435 + 0.706115I$ $b = -1.55282 - 0.17586I$	$-9.45221 - 1.59908I$	$-10.36413 - 2.46917I$
$u = 0.564862 + 1.080820I$ $a = 0.247391 + 0.117235I$ $b = -0.462098 - 0.376436I$	$-1.43963 + 4.27361I$	$-3.28652 - 1.94242I$
$u = 0.564862 - 1.080820I$ $a = 0.247391 - 0.117235I$ $b = -0.462098 + 0.376436I$	$-1.43963 - 4.27361I$	$-3.28652 + 1.94242I$
$u = 0.443976 + 0.410014I$ $a = -0.83249 + 1.56580I$ $b = 0.717243 - 0.152288I$	$0.639447 + 0.198383I$	$-2.33125 + 0.81736I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.443976 - 0.410014I$ $a = -0.83249 - 1.56580I$ $b = 0.717243 + 0.152288I$	$0.639447 - 0.198383I$	$-2.33125 - 0.81736I$
$u = -0.700273 + 1.221280I$ $a = -0.208029 + 1.117420I$ $b = -1.318300 - 0.155459I$	$-4.69184 - 6.21694I$	$-5.54626 + 10.85275I$
$u = -0.700273 - 1.221280I$ $a = -0.208029 - 1.117420I$ $b = -1.318300 + 0.155459I$	$-4.69184 + 6.21694I$	$-5.54626 - 10.85275I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{13} - u^{12} + \cdots - u - 1)(u^{72} + 17u^{70} + \cdots + u + 1)$
c_2	$(u^{13} + 7u^{12} + \cdots - 5u - 1)(u^{72} + 34u^{71} + \cdots + 11u + 1)$
c_3	$(u^{13} + u^{12} - u^{11} - 5u^{10} - 2u^9 + u^8 + u^7 - u^6 + 3u^5 + 3u^4 + u^3 - u^2 - u - 1)$ $\cdot (u^{72} + 6u^{71} + \cdots + 50529u + 18761)$
c_4	$(u^{13} + u^{12} + \cdots - u - 1)(u^{72} + 2u^{71} + \cdots + 17u - 1)$
c_5	$(u^{13} + u^{12} + \cdots - u + 1)(u^{72} + 17u^{70} + \cdots + u + 1)$
c_6	$(u^{13} + 2u^{12} + \cdots - 7u^2 + 1)(u^{72} - u^{71} + \cdots + 704u + 121)$
c_7, c_8	$(u^{13} - u^{12} + \cdots - u + 1)(u^{72} + 2u^{71} + \cdots + 17u - 1)$
c_9	$(u^{13} - u^{12} + u^{11} + u^{10} - 3u^9 + 3u^8 + u^7 + u^6 - u^5 - 2u^4 + 5u^3 - u^2 - u + 1)$ $\cdot (u^{72} - 2u^{71} + \cdots - 25u - 1)$
c_{10}	$(u^{13} - 2u^{12} + \cdots + 7u^2 - 1)(u^{72} - u^{71} + \cdots + 704u + 121)$
c_{11}	$(u^{13} + u^{12} + \cdots + 3u - 1)(u^{72} + 12u^{71} + \cdots - 916u - 88)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{13}+7y^{12}+\cdots-5y-1)(y^{72}+34y^{71}+\cdots+11y+1)$
c_2	$(y^{13}+3y^{12}+\cdots-13y-1)(y^{72}+14y^{71}+\cdots+87y+1)$
c_3	$(y^{13}-3y^{12}+\cdots-y-1)$ $\cdot\,(y^{72}+28y^{71}+\cdots+9764167099y+351975121)$
c_4, c_7, c_8	$(y^{13}-15y^{12}+\cdots+3y-1)(y^{72}-76y^{71}+\cdots-13y+1)$
c_6, c_{10}	$(y^{13}-14y^{12}+\cdots+14y-1)(y^{72}-59y^{71}+\cdots-471900y+14641)$
c_9	$(y^{13}+y^{12}+\cdots+3y-1)(y^{72}+4y^{71}+\cdots-33y+1)$
c_{11}	$(y^{13}+y^{12}+\cdots+3y-1)(y^{72}+8y^{71}+\cdots+92336y+7744)$