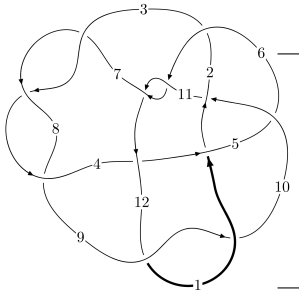
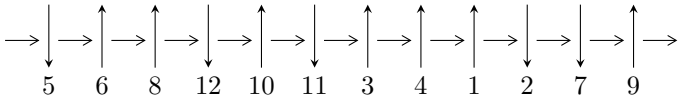
$12a_{1227}$ $(K12a_{1227})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 7.98393 \times 10^{349} u^{118} + 1.68479 \times 10^{350} u^{117} + \cdots + 6.11588 \times 10^{349} b + 3.23054 \times 10^{349}, \\ & - 1.60699 \times 10^{350} u^{118} - 1.85142 \times 10^{350} u^{117} + \cdots + 6.11588 \times 10^{349} a + 3.45671 \times 10^{351}, \\ & u^{119} + u^{118} + \cdots + 24u - 1 \rangle \\ I_2^u = \langle & -357u^{23} + 327u^{22} + \cdots + 1579b + 1708,\ -19392u^{23} + 8169u^{22} + \cdots + 30001a + 14942, \\ & u^{24} - 16u^{22} + \cdots + 4u - 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 143 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. $\boldsymbol{I_1^u = \langle 7.98 \times 10^{349} u^{118} + 1.68 \times 10^{350} u^{117} + \cdots + 6.12 \times 10^{349} b + 3.23 \times 10^{349},\ -1.61 \times 10^{350} u^{118} - 1.85 \times 10^{350} u^{117} + \cdots + 6.12 \times 10^{349} a + 3.46 \times 10^{351},\ u^{119} + u^{118} + \cdots + 24u - 1 \rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_4 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} 2.62757u^{118} + 3.02724u^{117} + \cdots + 182.921u - 56.5203 \\ -1.30544u^{118} - 2.75478u^{117} + \cdots - 32.8072u - 0.528222 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 3.93302u^{118} + 5.78201u^{117} + \cdots + 215.728u - 55.9920 \\ -1.30544u^{118} - 2.75478u^{117} + \cdots - 32.8072u - 0.528222 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -9.05213u^{118} - 12.4473u^{117} + \cdots - 1075.39u - 12.4747 \\ -2.62416u^{118} - 5.54499u^{117} + \cdots - 122.351u + 2.00968 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 3.77228u^{118} + 4.58088u^{117} + \cdots + 16.4140u - 72.6929 \\ -2.33609u^{118} - 5.29085u^{117} + \cdots - 40.3513u - 1.16876 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -8.43648u^{118} - 4.70064u^{117} + \cdots - 2933.04u - 14.4301 \\ 0.0426533u^{118} + 0.286147u^{117} + \cdots - 84.7869u - 0.871764 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 2.96289u^{118} + 3.85385u^{117} + \cdots + 199.978u - 56.9956 \\ -1.06822u^{118} - 2.22728u^{117} + \cdots - 32.5595u - 0.513198 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -3.11074u^{118} + 1.76443u^{117} + \cdots - 459.746u + 91.1873 \\ -0.992728u^{118} - 2.77364u^{117} + \cdots + 58.9070u + 0.0751447 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 5.87699u^{118} + 9.13379u^{117} + \cdots + 382.108u - 20.5150$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{119} - 6u^{118} + \cdots - 9u - 1$
c_2	$u^{119} - 6u^{117} + \cdots - 511u - 31$
c_3, c_7, c_8	$u^{119} + u^{118} + \cdots + 24u - 1$
c_4	$u^{119} + 23u^{117} + \cdots + 67021094u - 10361027$
c_5	$u^{119} + 3u^{118} + \cdots + 10287u + 923$
c_6, c_{11}	$u^{119} - u^{118} + \cdots - 3875u + 1543$
c_9, c_{12}	$u^{119} - 3u^{118} + \cdots - 75u + 25$
c_{10}	$u^{119} + 5u^{118} + \cdots - 11110u - 1273$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{119} - 8y^{118} + \cdots - 343y - 1$
c_2	$y^{119} - 12y^{118} + \cdots + 125031y - 961$
c_3, c_7, c_8	$y^{119} - 129y^{118} + \cdots + 2056y - 1$
c_4	$y^{119} + 46y^{118} + \cdots - 287139490646178y - 107350880494729$
c_5	$y^{119} - 35y^{118} + \cdots + 57121197y - 851929$
c_6, c_{11}	$y^{119} - 75y^{118} + \cdots + 37062009y - 2380849$
c_9, c_{12}	$y^{119} - 99y^{118} + \cdots + 45525y - 625$
c_{10}	$y^{119} - 35y^{118} + \cdots + 151840368y - 1620529$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.783826 + 0.673151I$ $a = -0.216827 - 0.203184I$ $b = -0.158928 - 0.491823I$	$4.99500 + 0.48815I$	0
$u = 0.783826 - 0.673151I$ $a = -0.216827 + 0.203184I$ $b = -0.158928 + 0.491823I$	$4.99500 - 0.48815I$	0
$u = 0.741550 + 0.749408I$ $a = -0.935113 - 0.871070I$ $b = -1.134540 - 0.277646I$	$-3.52756 - 3.70215I$	0
$u = 0.741550 - 0.749408I$ $a = -0.935113 + 0.871070I$ $b = -1.134540 + 0.277646I$	$-3.52756 + 3.70215I$	0
$u = -0.801817 + 0.421133I$ $a = 2.07033 - 0.17977I$ $b = 1.349560 + 0.071490I$	$0.508863 + 0.517461I$	0
$u = -0.801817 - 0.421133I$ $a = 2.07033 + 0.17977I$ $b = 1.349560 - 0.071490I$	$0.508863 - 0.517461I$	0
$u = 1.086750 + 0.206474I$ $a = 0.014400 + 0.364047I$ $b = 1.254800 + 0.195770I$	$1.61306 - 0.16049I$	0
$u = 1.086750 - 0.206474I$ $a = 0.014400 - 0.364047I$ $b = 1.254800 - 0.195770I$	$1.61306 + 0.16049I$	0
$u = 0.661944 + 0.893086I$ $a = -1.71425 - 0.40399I$ $b = -1.313280 + 0.473603I$	$0.40215 + 13.78770I$	0
$u = 0.661944 - 0.893086I$ $a = -1.71425 + 0.40399I$ $b = -1.313280 - 0.473603I$	$0.40215 - 13.78770I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.416097 + 0.782192I$ $a = 1.86636 + 0.24092I$ $b = 1.306350 - 0.488381I$	$-4.42041 + 8.82154I$	0
$u = 0.416097 - 0.782192I$ $a = 1.86636 - 0.24092I$ $b = 1.306350 + 0.488381I$	$-4.42041 - 8.82154I$	0
$u = -0.574695 + 0.647677I$ $a = 1.62529 - 0.92808I$ $b = 1.262230 + 0.455875I$	$-2.49040 - 6.19290I$	0
$u = -0.574695 - 0.647677I$ $a = 1.62529 + 0.92808I$ $b = 1.262230 - 0.455875I$	$-2.49040 + 6.19290I$	0
$u = -0.677505 + 0.524671I$ $a = 0.019107 + 0.301745I$ $b = 0.118594 + 0.926758I$	$4.71784 - 8.82006I$	0
$u = -0.677505 - 0.524671I$ $a = 0.019107 - 0.301745I$ $b = 0.118594 - 0.926758I$	$4.71784 + 8.82006I$	0
$u = -0.470312 + 1.045690I$ $a = -1.81475 + 0.19836I$ $b = -1.118810 - 0.326807I$	$2.26449 - 3.74317I$	0
$u = -0.470312 - 1.045690I$ $a = -1.81475 - 0.19836I$ $b = -1.118810 + 0.326807I$	$2.26449 + 3.74317I$	0
$u = -1.15263$ $a = -1.74831$ $b = -1.47880$	-3.79289	0
$u = -0.741818 + 0.385059I$ $a = 1.058650 - 0.239227I$ $b = 0.293372 - 0.493861I$	$4.60427 - 2.10056I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.741818-0.385059I$ $a=\ 1.058650+0.239227I$ $b=\ 0.293372+0.493861I$	$4.60427+2.10056I$	0
$u=-0.814321$ $a=\ 0.259978$ $b=\ 1.51848$	-5.07244	0
$u=\ 0.533083+1.061160I$ $a=\ 1.282920+0.147078I$ $b=\ 0.855188-0.331276I$	$3.43234+5.42187I$	0
$u=\ 0.533083-1.061160I$ $a=\ 1.282920-0.147078I$ $b=\ 0.855188+0.331276I$	$3.43234-5.42187I$	0
$u=-0.017184+0.806174I$ $a=\ 0.938496+0.607481I$ $b=\ 0.100038+0.252507I$	$2.72972+4.74887I$	0
$u=-0.017184-0.806174I$ $a=\ 0.938496-0.607481I$ $b=\ 0.100038-0.252507I$	$2.72972-4.74887I$	0
$u=\ 1.20000$ $a=-0.164115$ $b=\ 0.650906$	2.94755	0
$u=-0.388134+0.683011I$ $a=-2.00871+1.74934I$ $b=-1.168790-0.013308I$	$-0.74343-4.59228I$	0
$u=-0.388134-0.683011I$ $a=-2.00871-1.74934I$ $b=-1.168790+0.013308I$	$-0.74343+4.59228I$	0
$u=-0.449709+0.638205I$ $a=-1.34616+0.70408I$ $b=-1.193720+0.238463I$	$-2.86094+1.81157I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.449709-0.638205I$ $a=-1.34616-0.70408I$ $b=-1.193720-0.238463I$	$-2.86094-1.81157I$	0
$u=\ \ 0.539349+1.156330I$ $a=\ \ 1.308390+0.530212I$ $b=\ \ 1.133690+0.298052I$	$-0.13769-7.33062I$	0
$u=\ \ 0.539349-1.156330I$ $a=\ \ 1.308390-0.530212I$ $b=\ \ 1.133690-0.298052I$	$-0.13769+7.33062I$	0
$u=-1.288560+0.086773I$ $a=-0.71796+1.34991I$ $b=-0.792859-0.120664I$	$1.51857+2.36045I$	0
$u=-1.288560-0.086773I$ $a=-0.71796-1.34991I$ $b=-0.792859+0.120664I$	$1.51857-2.36045I$	0
$u=-0.450347+0.542142I$ $a=-1.66178+0.61740I$ $b=-1.36876-0.38183I$	$-4.96532-2.22329I$	0
$u=-0.450347-0.542142I$ $a=-1.66178-0.61740I$ $b=-1.36876+0.38183I$	$-4.96532+2.22329I$	0
$u=-0.374772+0.554234I$ $a=\ \ 1.34861-1.61629I$ $b=\ \ 1.215580-0.041173I$	$-5.14854-1.34204I$	0
$u=-0.374772-0.554234I$ $a=\ \ 1.34861+1.61629I$ $b=\ \ 1.215580+0.041173I$	$-5.14854+1.34204I$	0
$u=\ \ 0.133709+0.626579I$ $a=-1.57100-0.17686I$ $b=-0.730434+0.360984I$	$-0.56029+1.61420I$	$0.-4.39137I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.133709 - 0.626579I$ $a = -1.57100 + 0.17686I$ $b = -0.730434 - 0.360984I$	$-0.56029 - 1.61420I$	$0. + 4.39137I$
$u = 0.616361 + 0.135780I$ $a = 1.04478 - 1.01297I$ $b = -0.606663 + 0.683575I$	$3.02625 - 2.07929I$	$7.46406 + 2.32307I$
$u = 0.616361 - 0.135780I$ $a = 1.04478 + 1.01297I$ $b = -0.606663 - 0.683575I$	$3.02625 + 2.07929I$	$7.46406 - 2.32307I$
$u = -1.289390 + 0.482136I$ $a = 1.035570 - 0.686569I$ $b = 0.689723 + 0.021505I$	$4.69451 - 2.49642I$	0
$u = -1.289390 - 0.482136I$ $a = 1.035570 + 0.686569I$ $b = 0.689723 - 0.021505I$	$4.69451 + 2.49642I$	0
$u = -1.372900 + 0.101523I$ $a = 0.588471 - 0.807499I$ $b = 1.31854 + 1.05837I$	$2.68431 - 4.77965I$	0
$u = -1.372900 - 0.101523I$ $a = 0.588471 + 0.807499I$ $b = 1.31854 - 1.05837I$	$2.68431 + 4.77965I$	0
$u = 1.386500 + 0.014353I$ $a = 0.153501 - 0.393001I$ $b = 0.875671 + 0.336324I$	$3.19548 - 0.00342I$	0
$u = 1.386500 - 0.014353I$ $a = 0.153501 + 0.393001I$ $b = 0.875671 - 0.336324I$	$3.19548 + 0.00342I$	0
$u = -1.389630 + 0.057876I$ $a = 0.28113 + 1.60202I$ $b = 0.838085 - 0.100552I$	$6.32058 - 6.57897I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.389630-0.057876I$ $a=\ 0.28113-1.60202I$ $b=\ 0.838085+0.100552I$	$6.32058+6.57897I$	0
$u=-1.374270+0.215731I$ $a=\ 0.799521-0.901969I$ $b=\ 0.845827+0.747284I$	$4.28825-4.65871I$	0
$u=-1.374270-0.215731I$ $a=\ 0.799521+0.901969I$ $b=\ 0.845827-0.747284I$	$4.28825+4.65871I$	0
$u=-0.244644+0.535017I$ $a=\ 3.04658-0.38815I$ $b=\ 1.100900+0.347963I$	$-1.53053-4.40266I$	$-0.48702+8.42962I$
$u=-0.244644-0.535017I$ $a=\ 3.04658+0.38815I$ $b=\ 1.100900-0.347963I$	$-1.53053+4.40266I$	$-0.48702-8.42962I$
$u=\ 0.505354+0.285257I$ $a=-0.436845+0.238141I$ $b=\ 0.216998+0.552364I$	$0.982258+0.865831I$	$6.58800-2.25525I$
$u=\ 0.505354-0.285257I$ $a=-0.436845-0.238141I$ $b=\ 0.216998-0.552364I$	$0.982258-0.865831I$	$6.58800+2.25525I$
$u=-1.42284$ $a=\ 1.31390$ $b=\ 1.71674$	3.50236	0
$u=\ 0.402582+0.410829I$ $a=-0.587410-0.124366I$ $b=\ 0.107011+0.817052I$	$1.14718+1.43503I$	$0.-3.66081I$
$u=\ 0.402582-0.410829I$ $a=-0.587410+0.124366I$ $b=\ 0.107011-0.817052I$	$1.14718-1.43503I$	$0.+3.66081I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.43648 + 0.18164I$ $a = -0.275751 - 1.145720I$ $b = -1.000100 + 0.206076I$	$0.66182 + 4.01471I$	0
$u = 1.43648 - 0.18164I$ $a = -0.275751 + 1.145720I$ $b = -1.000100 - 0.206076I$	$0.66182 - 4.01471I$	0
$u = 1.45089 + 0.07164I$ $a = 0.111828 + 0.263317I$ $b = -0.03498 - 1.65762I$	$5.78604 + 4.91020I$	0
$u = 1.45089 - 0.07164I$ $a = 0.111828 - 0.263317I$ $b = -0.03498 + 1.65762I$	$5.78604 - 4.91020I$	0
$u = 1.45729 + 0.00794I$ $a = 1.07092 + 1.33028I$ $b = 1.234740 - 0.496336I$	$7.56598 + 6.03668I$	0
$u = 1.45729 - 0.00794I$ $a = 1.07092 - 1.33028I$ $b = 1.234740 + 0.496336I$	$7.56598 - 6.03668I$	0
$u = 1.44834 + 0.19448I$ $a = -1.14220 - 1.02923I$ $b = -1.291660 + 0.503632I$	$4.06289 + 7.10111I$	0
$u = 1.44834 - 0.19448I$ $a = -1.14220 + 1.02923I$ $b = -1.291660 - 0.503632I$	$4.06289 - 7.10111I$	0
$u = 1.44815 + 0.24478I$ $a = 0.989060 + 0.463033I$ $b = 1.060290 - 0.357460I$	$3.92561 + 1.61764I$	0
$u = 1.44815 - 0.24478I$ $a = 0.989060 - 0.463033I$ $b = 1.060290 + 0.357460I$	$3.92561 - 1.61764I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.46943+0.02975I$ $a=-0.441301-0.414304I$ $b=-1.44140+1.18312I$	$7.94678-3.36309I$	0
$u=-1.46943-0.02975I$ $a=-0.441301+0.414304I$ $b=-1.44140-1.18312I$	$7.94678+3.36309I$	0
$u=1.47254+0.00061I$ $a=-1.126420-0.604585I$ $b=-1.178530+0.373979I$	$8.88118+0.88776I$	0
$u=1.47254-0.00061I$ $a=-1.126420+0.604585I$ $b=-1.178530-0.373979I$	$8.88118-0.88776I$	0
$u=-1.47651+0.08583I$ $a=0.074116-0.633741I$ $b=-0.473324+1.122990I$	$7.27532-3.06177I$	0
$u=-1.47651-0.08583I$ $a=0.074116+0.633741I$ $b=-0.473324-1.122990I$	$7.27532+3.06177I$	0
$u=-0.159251+0.484137I$ $a=-1.50204-1.02306I$ $b=-0.253933-0.158386I$	$-0.97154+1.46811I$	$-2.06787-0.05927I$
$u=-0.159251-0.484137I$ $a=-1.50204+1.02306I$ $b=-0.253933+0.158386I$	$-0.97154-1.46811I$	$-2.06787+0.05927I$
$u=1.48382+0.16583I$ $a=0.581931+0.745668I$ $b=1.40995-0.74614I$	$1.34481+4.77242I$	0
$u=1.48382-0.16583I$ $a=0.581931-0.745668I$ $b=1.40995+0.74614I$	$1.34481-4.77242I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.47548+0.26535I$ $a=-0.919084+0.856884I$ $b=-1.40009-0.71233I$	$1.67974-12.58020I$	0
$u=-1.47548-0.26535I$ $a=-0.919084-0.856884I$ $b=-1.40009+0.71233I$	$1.67974+12.58020I$	0
$u=0.020730+0.495373I$ $a=-2.11879+0.42208I$ $b=-1.223280+0.615650I$	$-1.75362+2.92297I$	$-11.06509-4.64185I$
$u=0.020730-0.495373I$ $a=-2.11879-0.42208I$ $b=-1.223280-0.615650I$	$-1.75362-2.92297I$	$-11.06509+4.64185I$
$u=-1.51048+0.05060I$ $a=0.273239-0.332307I$ $b=-0.142709+0.892477I$	$7.68561-1.96433I$	0
$u=-1.51048-0.05060I$ $a=0.273239+0.332307I$ $b=-0.142709-0.892477I$	$7.68561+1.96433I$	0
$u=1.49906+0.22740I$ $a=0.58003+1.50112I$ $b=1.037900-0.178969I$	$5.46655+7.87006I$	0
$u=1.49906-0.22740I$ $a=0.58003-1.50112I$ $b=1.037900+0.178969I$	$5.46655-7.87006I$	0
$u=1.52861$ $a=-0.852788$ $b=-1.80094$	8.30730	0
$u=-0.365772+0.277281I$ $a=0.112919-0.759821I$ $b=-0.177076-1.006340I$	$-0.07704-3.67817I$	$3.15367+13.07569I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.365772-0.277281I$ $a=\ \ 0.112919+0.759821I$ $b=-0.177076+1.006340I$	$-0.07704+3.67817I$	$3.15367-13.07569I$
$u=\ \ 1.55634+0.16426I$ $a=-0.183345+0.137767I$ $b=-0.515489-1.018250I$	$12.12290+4.42041I$	0
$u=\ \ 1.55634-0.16426I$ $a=-0.183345-0.137767I$ $b=-0.515489+1.018250I$	$12.12290-4.42041I$	0
$u=\ \ 1.55651+0.21206I$ $a=-0.651315-1.047660I$ $b=-1.249910+0.648588I$	$4.57623+9.36223I$	0
$u=\ \ 1.55651-0.21206I$ $a=-0.651315+1.047660I$ $b=-1.249910-0.648588I$	$4.57623-9.36223I$	0
$u=\ \ 1.56259+0.17454I$ $a=-0.192044-0.241804I$ $b=-0.013322+1.325820I$	$12.1334+11.4548I$	0
$u=\ \ 1.56259-0.17454I$ $a=-0.192044+0.241804I$ $b=-0.013322-1.325820I$	$12.1334-11.4548I$	0
$u=\ \ 1.55748+0.35178I$ $a=\ \ 1.21380+0.79400I$ $b=\ \ 1.319590-0.482937I$	$8.87489+8.71547I$	0
$u=\ \ 1.55748-0.35178I$ $a=\ \ 1.21380-0.79400I$ $b=\ \ 1.319590+0.482937I$	$8.87489-8.71547I$	0
$u=-1.59528+0.07138I$ $a=-0.465733-0.433255I$ $b=\ \ 0.231914+0.762690I$	$10.67830+1.22120I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.59528-0.07138I$ $a=-0.465733+0.433255I$ $b=\ \ 0.231914-0.762690I$	$10.67830-1.22120I$	0
$u=-1.59240+0.18587I$ $a=-0.122942+0.192170I$ $b=\ \ 0.028521-0.936468I$	$12.89570-3.59750I$	0
$u=-1.59240-0.18587I$ $a=-0.122942-0.192170I$ $b=\ \ 0.028521+0.936468I$	$12.89570+3.59750I$	0
$u=-1.57325+0.33241I$ $a=-0.932182+0.637288I$ $b=-1.065600-0.641282I$	$10.3392-10.3124I$	0
$u=-1.57325-0.33241I$ $a=-0.932182-0.637288I$ $b=-1.065600+0.641282I$	$10.3392+10.3124I$	0
$u=-1.59134+0.30352I$ $a=\ \ 1.012700-0.839321I$ $b=\ \ 1.41081+0.63434I$	$7.7367-18.2084I$	0
$u=-1.59134-0.30352I$ $a=\ \ 1.012700+0.839321I$ $b=\ \ 1.41081-0.63434I$	$7.7367+18.2084I$	0
$u=-1.66904$ $a=\ \ 0.470054$ $b=-0.841358$	11.1048	0
$u=\ \ 0.296335+0.109239I$ $a=\ \ 1.31456-0.61954I$ $b=\ \ 1.08045+0.93016I$	$2.00451+2.89191I$	$20.3369-9.3949I$
$u=\ \ 0.296335-0.109239I$ $a=\ \ 1.31456+0.61954I$ $b=\ \ 1.08045-0.93016I$	$2.00451-2.89191I$	$20.3369+9.3949I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.274958+0.033509I$ $a=\ \ 3.92057+2.96124I$ $b=\ \ 0.692511-0.216965I$	$2.94258+0.93458I$	$4.62277-3.39827I$
$u=-0.274958-0.033509I$ $a=\ \ 3.92057-2.96124I$ $b=\ \ 0.692511+0.216965I$	$2.94258-0.93458I$	$4.62277+3.39827I$
$u=-1.79937$ $a=\ \ 0.298486$ $b=\ \ 0.807346$	5.89015	0
$u=\ \ 1.72055+0.54759I$ $a=-0.969803-0.258788I$ $b=-1.023630+0.324004I$	$7.24461+1.68751I$	0
$u=\ \ 1.72055-0.54759I$ $a=-0.969803+0.258788I$ $b=-1.023630-0.324004I$	$7.24461-1.68751I$	0
$u=-0.139795+0.034965I$ $a=-1.43141-13.25760I$ $b=-0.979882+0.342748I$	$1.99476+6.03873I$	$8.82818-7.50254I$
$u=-0.139795-0.034965I$ $a=-1.43141+13.25760I$ $b=-0.979882-0.342748I$	$1.99476-6.03873I$	$8.82818+7.50254I$
$u=\ \ 0.0228075$ $a=-47.4142$ $b=-1.44122$	-1.54394	-6.89090
$u=-2.18237$ $a=-0.668221$ $b=-0.805343$	8.97848	0

II. $I_2^u = \langle -357u^{23} + 327u^{22} + \cdots + 1579b + 1708,\ -19392u^{23} + 8169u^{22} + \cdots + 30001a + 14942,\ u^{24} - 16u^{22} + \cdots + 4u - 1\rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_4 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} 0.646378u^{23} - 0.272291u^{22} + \cdots + 3.88070u - 0.498050 \\ 0.226092u^{23} - 0.207093u^{22} + \cdots - 1.69411u - 1.08170 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.420286u^{23} - 0.0651978u^{22} + \cdots + 5.57481u + 0.583647 \\ 0.226092u^{23} - 0.207093u^{22} + \cdots - 1.69411u - 1.08170 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.617513u^{23} - 0.251158u^{22} + \cdots - 6.93854u + 1.40889 \\ -0.114130u^{23} - 0.422219u^{22} + \cdots + 8.41215u - 1.73054 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.121329u^{23} - 0.885770u^{22} + \cdots + 1.29096u + 2.60421 \\ -u^{21} + 14u^{19} + \cdots - 6u + 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.543549u^{23} + 0.435785u^{22} + \cdots - 3.01693u - 0.490084 \\ -1.62061u^{23} + 1.45435u^{22} + \cdots + 1.38635u - 1.00087 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.294657u^{23} + 0.00829972u^{22} + \cdots + 5.29339u - 1.18166 \\ -0.196127u^{23} + 0.242892u^{22} + \cdots - 1.96813u - 1.19583 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.34049u^{23} + 0.286224u^{22} + \cdots + 1.76844u + 1.62281 \\ 1.49808u^{23} - 1.58405u^{22} + \cdots + 0.884404u - 1.17246 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{72929}{30001}u^{23} + \frac{337327}{30001}u^{22} + \cdots - \frac{1432645}{30001}u + \frac{111446}{30001}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{24}+7u^{23}+\cdots-u-1$
c_2	$u^{24}-u^{23}+\cdots-9u+1$
c_3	$u^{24}-16u^{22}+\cdots-4u-1$
c_4	$u^{24}+u^{23}+\cdots+10u-1$
c_5	$u^{24}-5u^{22}+\cdots+u+1$
c_6	$u^{24}-9u^{22}+\cdots+u+1$
c_7, c_8	$u^{24}-16u^{22}+\cdots+4u-1$
c_9	$u^{24}-11u^{22}+\cdots-27u+1$
c_{10}	$u^{24}-7u^{22}+\cdots+2u+1$
c_{11}	$u^{24}-9u^{22}+\cdots-u+1$
c_{12}	$u^{24}-11u^{22}+\cdots+27u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{24} - 11y^{23} + \cdots - 17y + 1$
c_2	$y^{24} - 7y^{23} + \cdots - 11y + 1$
c_3, c_7, c_8	$y^{24} - 32y^{23} + \cdots + 8y + 1$
c_4	$y^{24} + 7y^{23} + \cdots - 62y + 1$
c_5	$y^{24} - 10y^{23} + \cdots - 37y + 1$
c_6, c_{11}	$y^{24} - 18y^{23} + \cdots - 49y + 1$
c_9, c_{12}	$y^{24} - 22y^{23} + \cdots - 557y + 1$
c_{10}	$y^{24} - 14y^{23} + \cdots - 16y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.884276$ $a=\ \ 2.45094$ $b=\ \ 1.38868$	-0.416234	-0.988440
$u=\ \ 0.833726+0.150154I$ $a=-0.926544+0.380924I$ $b=\ \ 0.355362-0.010123I$	$3.72145-0.05680I$	$10.28367+0.19864I$
$u=\ \ 0.833726-0.150154I$ $a=-0.926544-0.380924I$ $b=\ \ 0.355362+0.010123I$	$3.72145+0.05680I$	$10.28367-0.19864I$
$u=-1.15525$ $a=-1.56847$ $b=-1.51687$	-3.55309	18.2890
$u=-1.20318$ $a=-0.0821325$ $b=-1.58263$	0.995515	-8.27780
$u=-0.025011+0.776030I$ $a=-2.86772-0.23928I$ $b=-1.039190-0.237902I$	$1.01230-5.88067I$	$1.29205+6.08376I$
$u=-0.025011-0.776030I$ $a=-2.86772+0.23928I$ $b=-1.039190+0.237902I$	$1.01230+5.88067I$	$1.29205-6.08376I$
$u=\ \ 1.309980+0.414989I$ $a=-1.231750-0.608402I$ $b=-0.825626+0.284908I$	$4.58217+3.17986I$	$7.54563-8.28419I$
$u=\ \ 1.309980-0.414989I$ $a=-1.231750+0.608402I$ $b=-0.825626-0.284908I$	$4.58217-3.17986I$	$7.54563+8.28419I$
$u=\ \ 1.394540+0.123801I$ $a=-0.584880-0.951528I$ $b=-1.097060+0.885087I$	$3.26605+4.85652I$	$6.97618-7.72007I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.394540 - 0.123801I$ $a = -0.584880 + 0.951528I$ $b = -1.097060 - 0.885087I$	$3.26605 - 4.85652I$	$6.97618 + 7.72007I$
$u = -0.574755$ $a = -0.227975$ $b = 1.42900$	-5.58200	-11.1710
$u = -1.47094 + 0.05717I$ $a = -0.001002 + 0.527267I$ $b = 0.85114 - 1.28772I$	$7.38429 - 3.80681I$	$4.81015 + 9.84440I$
$u = -1.47094 - 0.05717I$ $a = -0.001002 - 0.527267I$ $b = 0.85114 + 1.28772I$	$7.38429 + 3.80681I$	$4.81015 - 9.84440I$
$u = 1.47727 + 0.22147I$ $a = 0.95975 + 1.47389I$ $b = 1.119070 - 0.447302I$	$6.35147 + 9.15877I$	$6.68737 - 8.90723I$
$u = 1.47727 - 0.22147I$ $a = 0.95975 - 1.47389I$ $b = 1.119070 + 0.447302I$	$6.35147 - 9.15877I$	$6.68737 + 8.90723I$
$u = 0.113555 + 0.417006I$ $a = 2.64848 + 0.87489I$ $b = 0.973554 + 0.523239I$	$-1.25401 - 3.09727I$	$3.40503 + 7.09735I$
$u = 0.113555 - 0.417006I$ $a = 2.64848 - 0.87489I$ $b = 0.973554 - 0.523239I$	$-1.25401 + 3.09727I$	$3.40503 - 7.09735I$
$u = -1.62613$ $a = 0.787899$ $b = -0.213369$	12.0623	14.7780
$u = 1.67524$ $a = 0.865780$ $b = 1.31918$	7.20543	4.85320

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.167360 + 0.265304I$ $a = 0.867629 - 0.271365I$ $b = -0.836022 - 0.766453I$	$1.66995 + 2.82115I$	$-3.62017 - 4.11427I$
$u = 0.167360 - 0.265304I$ $a = 0.867629 + 0.271365I$ $b = -0.836022 + 0.766453I$	$1.66995 - 2.82115I$	$-3.62017 + 4.11427I$
$u = -1.77280$ $a = -0.411447$ $b = -0.711622$	6.16034	19.1770
$u = -2.05983$ $a = 0.457495$ $b = 0.885184$	8.61720	0

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{24}+7u^{23}+\cdots-u-1)(u^{119}-6u^{118}+\cdots-9u-1)$
c_2	$(u^{24}-u^{23}+\cdots-9u+1)(u^{119}-6u^{117}+\cdots-511u-31)$
c_3	$(u^{24}-16u^{22}+\cdots-4u-1)(u^{119}+u^{118}+\cdots+24u-1)$
c_4	$(u^{24}+u^{23}+\cdots+10u-1)$ $\cdot(u^{119}+23u^{117}+\cdots+67021094u-10361027)$
c_5	$(u^{24}-5u^{22}+\cdots+u+1)(u^{119}+3u^{118}+\cdots+10287u+923)$
c_6	$(u^{24}-9u^{22}+\cdots+u+1)(u^{119}-u^{118}+\cdots-3875u+1543)$
c_7, c_8	$(u^{24}-16u^{22}+\cdots+4u-1)(u^{119}+u^{118}+\cdots+24u-1)$
c_9	$(u^{24}-11u^{22}+\cdots-27u+1)(u^{119}-3u^{118}+\cdots-75u+25)$
c_{10}	$(u^{24}-7u^{22}+\cdots+2u+1)(u^{119}+5u^{118}+\cdots-11110u-1273)$
c_{11}	$(u^{24}-9u^{22}+\cdots-u+1)(u^{119}-u^{118}+\cdots-3875u+1543)$
c_{12}	$(u^{24}-11u^{22}+\cdots+27u+1)(u^{119}-3u^{118}+\cdots-75u+25)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{24}-11y^{23}+\cdots-17y+1)(y^{119}-8y^{118}+\cdots-343y-1)$
c_2	$(y^{24}-7y^{23}+\cdots-11y+1)(y^{119}-12y^{118}+\cdots+125031y-961)$
c_3, c_7, c_8	$(y^{24}-32y^{23}+\cdots+8y+1)(y^{119}-129y^{118}+\cdots+2056y-1)$
c_4	$(y^{24}+7y^{23}+\cdots-62y+1)$ $\cdot(y^{119}+46y^{118}+\cdots-287139490646178y-107350880494729)$
c_5	$(y^{24}-10y^{23}+\cdots-37y+1)$ $\cdot(y^{119}-35y^{118}+\cdots+57121197y-851929)$
c_6, c_{11}	$(y^{24}-18y^{23}+\cdots-49y+1)$ $\cdot(y^{119}-75y^{118}+\cdots+37062009y-2380849)$
c_9, c_{12}	$(y^{24}-22y^{23}+\cdots-557y+1)(y^{119}-99y^{118}+\cdots+45525y-625)$
c_{10}	$(y^{24}-14y^{23}+\cdots-16y+1)$ $\cdot(y^{119}-35y^{118}+\cdots+151840368y-1620529)$