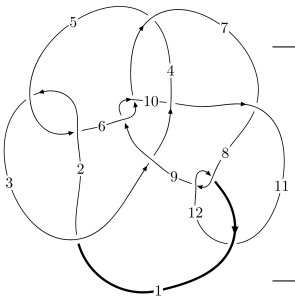
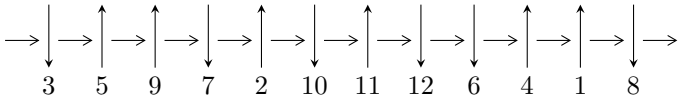
$12a_{0184}$ $(K12a_{0184})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 1.32502 \times 10^{415} u^{119} + 2.54170 \times 10^{414} u^{118} + \cdots + 4.01044 \times 10^{414} b + 1.64747 \times 10^{415}, \\ & - 2.94399 \times 10^{415} u^{119} + 8.35823 \times 10^{413} u^{118} + \cdots + 4.01044 \times 10^{414} a - 4.49947 \times 10^{415}, \\ & u^{120} + u^{119} + \cdots + 10u^3 + 1 \rangle \end{aligned}$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 120 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. $\boldsymbol{I_1^u = \langle 1.33 \times 10^{415} u^{119} + 2.54 \times 10^{414} u^{118} + \cdots + 4.01 \times 10^{414} b + 1.65 \times 10^{415},\ -2.94 \times 10^{415} u^{119} + 8.36 \times 10^{413} u^{118} + \cdots + 4.01 \times 10^{414} a - 4.50 \times 10^{415},\ u^{120} + u^{119} + \cdots + 10u^3 + 1 \rangle}$

(i) Arc colorings

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

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

$$a_2 = \begin{pmatrix} 7.34081u^{119} - 0.208412u^{118} + \cdots - 10.6447u + 11.2194 \\ -3.30393u^{119} - 0.633771u^{118} + \cdots + 6.62963u - 4.10796 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 4.01710u^{119} + 0.119879u^{118} + \cdots - 3.90539u + 6.04797 \\ -3.21398u^{119} - 0.625442u^{118} + \cdots + 6.57033u - 4.99074 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.45823u^{119} - 0.337341u^{118} + \cdots + 1.35147u + 1.99223 \\ -3.87235u^{119} - 0.835695u^{118} + \cdots + 7.67638u - 6.04582 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.465417u^{119} - 0.193298u^{118} + \cdots + 0.190894u - 1.89568 \\ -1.79434u^{119} - 0.567792u^{118} + \cdots + 3.10178u - 2.81939 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2.41952u^{119} - 0.429440u^{118} + \cdots + 6.68204u - 2.83999 \\ -7.75010u^{119} - 0.927794u^{118} + \cdots + 13.0070u - 10.8780 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 2.81939u^{119} + 1.02505u^{118} + \cdots - 7.07901u + 3.10178 \\ 0.272120u^{119} + 0.227342u^{118} + \cdots - 1.89568u + 0.465417 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.449390u^{119} - 0.0914268u^{118} + \cdots + 0.730282u + 0.133441 \\ 0.589239u^{119} - 0.181546u^{118} + \cdots - 0.203075u + 0.449511 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1.84197u^{119} + 0.631727u^{118} + \cdots - 6.73022u + 2.27079 \\ 1.07750u^{119} + 0.405949u^{118} + \cdots - 2.93100u + 1.45822 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 64.8920u^{119} + 14.0763u^{118} + \cdots - 80.1155u + 70.0515$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{120} + 49u^{119} + \cdots + 140u + 1$
c_2, c_5	$u^{120} + u^{119} + \cdots + 20u + 1$
c_3	$u^{120} - 15u^{119} + \cdots - 620400u + 166375$
c_4	$u^{120} + 5u^{119} + \cdots - 14u + 1$
c_6, c_9	$u^{120} + u^{119} + \cdots + 10u^3 + 1$
c_7	$u^{120} - 5u^{119} + \cdots - 1412636u + 186749$
c_8, c_{12}	$u^{120} + 5u^{119} + \cdots + 2u + 1$
c_{10}	$u^{120} - 3u^{119} + \cdots - 4u + 1$
c_{11}	$u^{120} - 61u^{119} + \cdots - 10u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{120}+45y^{119}+\cdots+3100y+1$
c_2, c_5	$y^{120}+49y^{119}+\cdots+140y+1$
c_3	$y^{120}-71y^{119}+\cdots-1592489167500y+27680640625$
c_4	$y^{120}-87y^{119}+\cdots+408y+1$
c_6, c_9	$y^{120}-75y^{119}+\cdots-50y^2+1$
c_7	$y^{120}-67y^{119}+\cdots+1230496216784y+34875189001$
c_8, c_{12}	$y^{120}+61y^{119}+\cdots-10y^2+1$
c_{10}	$y^{120}+5y^{119}+\cdots-12y+1$
c_{11}	$y^{120}-3y^{119}+\cdots-20y+1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.968815+0.263847I$ $a=\ \ 0.659879-0.199928I$ $b=-0.149910+0.142046I$	$-1.74268+0.44680I$	0
$u=-0.968815-0.263847I$ $a=\ \ 0.659879+0.199928I$ $b=-0.149910-0.142046I$	$-1.74268-0.44680I$	0
$u=-0.152224+0.999564I$ $a=\ \ 0.628170-0.349032I$ $b=-0.820693-0.566702I$	$6.48172-7.85840I$	0
$u=-0.152224-0.999564I$ $a=\ \ 0.628170+0.349032I$ $b=-0.820693+0.566702I$	$6.48172+7.85840I$	0
$u=\ \ 0.181228+1.000380I$ $a=\ \ 0.665778+0.361828I$ $b=-0.759835+0.576211I$	$3.53949+2.81676I$	0
$u=\ \ 0.181228-1.000380I$ $a=\ \ 0.665778-0.361828I$ $b=-0.759835-0.576211I$	$3.53949-2.81676I$	0
$u=-1.016110+0.075877I$ $a=-3.59461+4.97979I$ $b=\ \ 0.494087+0.893840I$	$-1.72705+2.19327I$	0
$u=-1.016110-0.075877I$ $a=-3.59461-4.97979I$ $b=\ \ 0.494087-0.893840I$	$-1.72705-2.19327I$	0
$u=\ \ 0.977597+0.050115I$ $a=\ \ 6.80136-6.65825I$ $b=\ \ 0.489268+0.873093I$	$0.77684+5.69004I$	0
$u=\ \ 0.977597-0.050115I$ $a=\ \ 6.80136+6.65825I$ $b=\ \ 0.489268-0.873093I$	$0.77684-5.69004I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.980721+0.305889I$ $a=-0.42680+1.97842I$ $b=\ \ 0.75112+1.20479I$	$2.37109+2.10139I$	0
$u=-0.980721-0.305889I$ $a=-0.42680-1.97842I$ $b=\ \ 0.75112-1.20479I$	$2.37109-2.10139I$	0
$u=\ \ 1.044770+0.006086I$ $a=\ \ 5.54806-10.76860I$ $b=\ \ 0.496806-0.855658I$	$0.83334+1.67383I$	0
$u=\ \ 1.044770-0.006086I$ $a=\ \ 5.54806+10.76860I$ $b=\ \ 0.496806+0.855658I$	$0.83334-1.67383I$	0
$u=\ \ 1.013380+0.295401I$ $a=-0.49253-2.11186I$ $b=\ \ 0.655672-1.233140I$	$-1.08521-5.57366I$	0
$u=\ \ 1.013380-0.295401I$ $a=-0.49253+2.11186I$ $b=\ \ 0.655672+1.233140I$	$-1.08521+5.57366I$	0
$u=-1.014450+0.317491I$ $a=-0.41222+2.12361I$ $b=\ \ 0.68609+1.29203I$	$1.66407+9.98438I$	0
$u=-1.014450-0.317491I$ $a=-0.41222-2.12361I$ $b=\ \ 0.68609-1.29203I$	$1.66407-9.98438I$	0
$u=-0.176232+1.050990I$ $a=\ \ 0.648720-0.420445I$ $b=-0.764447-0.669522I$	$7.99705+1.01152I$	0
$u=-0.176232-1.050990I$ $a=\ \ 0.648720+0.420445I$ $b=-0.764447+0.669522I$	$7.99705-1.01152I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.896937 + 0.239839I$ $a = -0.62717 - 1.30306I$ $b = 0.763001 - 0.935297I$	$0.25450 - 4.06184I$	0
$u = 0.896937 - 0.239839I$ $a = -0.62717 + 1.30306I$ $b = 0.763001 + 0.935297I$	$0.25450 + 4.06184I$	0
$u = 1.071210 + 0.256791I$ $a = -0.52867 - 2.35753I$ $b = 0.475064 - 1.197000I$	$-2.65812 - 5.38003I$	0
$u = 1.071210 - 0.256791I$ $a = -0.52867 + 2.35753I$ $b = 0.475064 + 1.197000I$	$-2.65812 + 5.38003I$	0
$u = 1.103570 + 0.099322I$ $a = 1.087890 + 0.408883I$ $b = -0.0420115 + 0.0939793I$	$0.75407 + 3.78087I$	0
$u = 1.103570 - 0.099322I$ $a = 1.087890 - 0.408883I$ $b = -0.0420115 - 0.0939793I$	$0.75407 - 3.78087I$	0
$u = -1.112620 + 0.156874I$ $a = -0.25760 + 3.02412I$ $b = 0.361930 + 0.997640I$	$-2.52969 + 2.07522I$	0
$u = -1.112620 - 0.156874I$ $a = -0.25760 - 3.02412I$ $b = 0.361930 - 0.997640I$	$-2.52969 - 2.07522I$	0
$u = -0.809728 + 0.313104I$ $a = 0.160608 + 1.160160I$ $b = 1.020180 + 0.770560I$	$4.44661 + 7.34329I$	0
$u = -0.809728 - 0.313104I$ $a = 0.160608 - 1.160160I$ $b = 1.020180 - 0.770560I$	$4.44661 - 7.34329I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.038039+1.134720I$ $a=\ \ 0.606548+0.585687I$ $b=-0.667570+1.059470I$	$4.9888-13.4302I$	0
$u=-0.038039-1.134720I$ $a=\ \ 0.606548-0.585687I$ $b=-0.667570-1.059470I$	$4.9888+13.4302I$	0
$u=-0.860453+0.039621I$ $a=\ \ 0.54434+2.52969I$ $b=\ \ 0.469210-0.808965I$	$-1.45171-1.78880I$	0
$u=-0.860453-0.039621I$ $a=\ \ 0.54434-2.52969I$ $b=\ \ 0.469210+0.808965I$	$-1.45171+1.78880I$	0
$u=\ \ 0.785804+0.319574I$ $a=\ \ 1.80582-0.19070I$ $b=\ \ 0.188827+0.780626I$	$-0.06237-2.97353I$	0
$u=\ \ 0.785804-0.319574I$ $a=\ \ 1.80582+0.19070I$ $b=\ \ 0.188827-0.780626I$	$-0.06237+2.97353I$	0
$u=\ \ 0.796985+0.285519I$ $a=\ \ 0.100275-0.981468I$ $b=\ \ 0.939637-0.720732I$	$1.45532-3.16041I$	0
$u=\ \ 0.796985-0.285519I$ $a=\ \ 0.100275+0.981468I$ $b=\ \ 0.939637+0.720732I$	$1.45532+3.16041I$	0
$u=\ \ 0.046348+1.158610I$ $a=\ \ 0.610448-0.581415I$ $b=-0.643815-1.035610I$	$2.16104+8.14604I$	0
$u=\ \ 0.046348-1.158610I$ $a=\ \ 0.610448+0.581415I$ $b=-0.643815+1.035610I$	$2.16104-8.14604I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.770155+0.309408I$ $a=\ \ 0.316848+0.982259I$ $b=\ \ 1.019390+0.638770I$	$4.70810-0.68888I$	0
$u=-0.770155-0.309408I$ $a=\ \ 0.316848-0.982259I$ $b=\ \ 1.019390-0.638770I$	$4.70810+0.68888I$	0
$u=\ \ 0.001482+1.178390I$ $a=\ \ 0.608990+0.571667I$ $b=-0.673629+0.982643I$	$7.04852-4.43074I$	0
$u=\ \ 0.001482-1.178390I$ $a=\ \ 0.608990-0.571667I$ $b=-0.673629-0.982643I$	$7.04852+4.43074I$	0
$u=-0.778967+0.189468I$ $a=\ \ 1.63573+0.80594I$ $b=\ \ 0.333011-0.762303I$	$-1.66369-1.05593I$	0
$u=-0.778967-0.189468I$ $a=\ \ 1.63573-0.80594I$ $b=\ \ 0.333011+0.762303I$	$-1.66369+1.05593I$	0
$u=-0.610777+1.061180I$ $a=\ \ 0.524096+0.458653I$ $b=-0.370822+0.886828I$	$-2.45608+0.11705I$	0
$u=-0.610777-1.061180I$ $a=\ \ 0.524096-0.458653I$ $b=-0.370822-0.886828I$	$-2.45608-0.11705I$	0
$u=-1.209000+0.281705I$ $a=-0.22654+2.18315I$ $b=\ \ 0.113592+1.264190I$	$-2.30249+2.61766I$	0
$u=-1.209000-0.281705I$ $a=-0.22654-2.18315I$ $b=\ \ 0.113592-1.264190I$	$-2.30249-2.61766I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.173200+0.499513I$ $a=\ \ 0.016542-0.248526I$ $b=-0.674425+0.293435I$	$-3.26933+1.94065I$	0
$u=-1.173200-0.499513I$ $a=\ \ 0.016542+0.248526I$ $b=-0.674425-0.293435I$	$-3.26933-1.94065I$	0
$u=-1.235230+0.330826I$ $a=-0.33660+2.05709I$ $b=\ \ 0.000090+1.376030I$	$-3.88318+10.29360I$	0
$u=-1.235230-0.330826I$ $a=-0.33660-2.05709I$ $b=\ \ 0.000090-1.376030I$	$-3.88318-10.29360I$	0
$u=\ \ 1.249370+0.315680I$ $a=-0.27835-2.02802I$ $b=-0.020794-1.319000I$	$-6.37245-5.49943I$	0
$u=\ \ 1.249370-0.315680I$ $a=-0.27835+2.02802I$ $b=-0.020794+1.319000I$	$-6.37245+5.49943I$	0
$u=\ \ 0.667871+0.238591I$ $a=\ \ 0.571406-0.367639I$ $b=\ \ 0.693768-0.342077I$	$1.43597-1.44832I$	0
$u=\ \ 0.667871-0.238591I$ $a=\ \ 0.571406+0.367639I$ $b=\ \ 0.693768+0.342077I$	$1.43597+1.44832I$	0
$u=\ \ 0.296341+1.266470I$ $a=\ \ 0.588887-0.562357I$ $b=-0.481408-0.968073I$	$-1.61974+5.47678I$	0
$u=\ \ 0.296341-1.266470I$ $a=\ \ 0.588887+0.562357I$ $b=-0.481408+0.968073I$	$-1.61974-5.47678I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.167494 + 0.661720I$ $a = 0.903205 + 0.107287I$ $b = -0.389075 + 0.210986I$	$-0.02978 + 1.99251I$	$0. - 4.09661I$
$u = 0.167494 - 0.661720I$ $a = 0.903205 - 0.107287I$ $b = -0.389075 - 0.210986I$	$-0.02978 - 1.99251I$	$0. + 4.09661I$
$u = 1.214800 + 0.521187I$ $a = -0.161544 + 0.233318I$ $b = -0.800241 - 0.340413I$	$-2.96816 - 6.77417I$	0
$u = 1.214800 - 0.521187I$ $a = -0.161544 - 0.233318I$ $b = -0.800241 + 0.340413I$	$-2.96816 + 6.77417I$	0
$u = -0.358202 + 0.575222I$ $a = 0.775608 + 0.253363I$ $b = 0.055198 + 0.935323I$	$-1.86867 + 2.32778I$	$-4.16150 - 4.26008I$
$u = -0.358202 - 0.575222I$ $a = 0.775608 - 0.253363I$ $b = 0.055198 - 0.935323I$	$-1.86867 - 2.32778I$	$-4.16150 + 4.26008I$
$u = -0.577597 + 0.322617I$ $a = 1.010470 + 0.496488I$ $b = 0.963749 - 0.118733I$	$5.13731 + 3.86705I$	$8.70425 - 5.11738I$
$u = -0.577597 - 0.322617I$ $a = 1.010470 - 0.496488I$ $b = 0.963749 + 0.118733I$	$5.13731 - 3.86705I$	$8.70425 + 5.11738I$
$u = 0.980105 + 0.918904I$ $a = 1.101110 + 0.850671I$ $b = -0.372805 + 0.876227I$	$-0.91368 + 2.12098I$	0
$u = 0.980105 - 0.918904I$ $a = 1.101110 - 0.850671I$ $b = -0.372805 - 0.876227I$	$-0.91368 - 2.12098I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.313230 + 0.309824I$ $a = -0.19412 - 1.83541I$ $b = -0.156769 - 1.226740I$	$-8.13253 - 3.85633I$	0
$u = 1.313230 - 0.309824I$ $a = -0.19412 + 1.83541I$ $b = -0.156769 + 1.226740I$	$-8.13253 + 3.85633I$	0
$u = 0.239956 + 0.595319I$ $a = 0.855037 - 0.298245I$ $b = 0.103548 - 1.063830I$	$0.32262 - 6.94765I$	$0. + 7.76889I$
$u = 0.239956 - 0.595319I$ $a = 0.855037 + 0.298245I$ $b = 0.103548 + 1.063830I$	$0.32262 + 6.94765I$	$0. - 7.76889I$
$u = 1.253970 + 0.545654I$ $a = -0.386501 + 0.134294I$ $b = -0.933728 - 0.457141I$	$0.18231 - 8.32135I$	0
$u = 1.253970 - 0.545654I$ $a = -0.386501 - 0.134294I$ $b = -0.933728 + 0.457141I$	$0.18231 + 8.32135I$	0
$u = 0.553827 + 0.295260I$ $a = 1.015630 - 0.401726I$ $b = 0.840275 + 0.199641I$	$1.97978 + 0.12263I$	$5.24306 + 0.97466I$
$u = 0.553827 - 0.295260I$ $a = 1.015630 + 0.401726I$ $b = 0.840275 - 0.199641I$	$1.97978 - 0.12263I$	$5.24306 - 0.97466I$
$u = -1.262070 + 0.544014I$ $a = -0.442388 - 0.143298I$ $b = -0.973198 + 0.463991I$	$3.02818 + 13.35620I$	0
$u = -1.262070 - 0.544014I$ $a = -0.442388 + 0.143298I$ $b = -0.973198 - 0.463991I$	$3.02818 - 13.35620I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.533608+0.325223I$ $a=1.095880+0.423478I$ $b=0.947198-0.291731I$	$5.07577-4.18287I$	$8.41753+2.84009I$
$u=-0.533608-0.325223I$ $a=1.095880-0.423478I$ $b=0.947198+0.291731I$	$5.07577+4.18287I$	$8.41753-2.84009I$
$u=-1.255710+0.560612I$ $a=-0.384857-0.039679I$ $b=-0.911581+0.519532I$	$4.62850+4.66407I$	0
$u=-1.255710-0.560612I$ $a=-0.384857+0.039679I$ $b=-0.911581-0.519532I$	$4.62850-4.66407I$	0
$u=-1.358890+0.306655I$ $a=-0.13484+1.70545I$ $b=-0.229309+1.162940I$	$-7.59861-0.89325I$	0
$u=-1.358890-0.306655I$ $a=-0.13484-1.70545I$ $b=-0.229309-1.162940I$	$-7.59861+0.89325I$	0
$u=1.203120+0.734855I$ $a=0.027731-0.334252I$ $b=-0.599287-0.692681I$	$3.23852-2.41685I$	0
$u=1.203120-0.734855I$ $a=0.027731+0.334252I$ $b=-0.599287+0.692681I$	$3.23852+2.41685I$	0
$u=-1.34874+0.56518I$ $a=0.86245-1.78711I$ $b=-0.688200-1.155230I$	$0.8979+19.3944I$	0
$u=-1.34874-0.56518I$ $a=0.86245+1.78711I$ $b=-0.688200+1.155230I$	$0.8979-19.3944I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.33327 + 0.60917I$ $a = 0.96984 + 1.62324I$ $b = -0.592079 + 1.118120I$	$-5.23361 - 11.94400I$	0
$u = 1.33327 - 0.60917I$ $a = 0.96984 - 1.62324I$ $b = -0.592079 - 1.118120I$	$-5.23361 + 11.94400I$	0
$u = 1.34944 + 0.57275I$ $a = 0.87233 + 1.75095I$ $b = -0.672445 + 1.142200I$	$-1.9116 - 14.1946I$	0
$u = 1.34944 - 0.57275I$ $a = 0.87233 - 1.75095I$ $b = -0.672445 - 1.142200I$	$-1.9116 + 14.1946I$	0
$u = -1.32765 + 0.63998I$ $a = 0.99370 - 1.52844I$ $b = -0.554941 - 1.087880I$	$-5.45393 + 6.64274I$	0
$u = -1.32765 - 0.63998I$ $a = 0.99370 + 1.52844I$ $b = -0.554941 + 1.087880I$	$-5.45393 - 6.64274I$	0
$u = -1.36344 + 0.57413I$ $a = 0.81668 - 1.71870I$ $b = -0.686542 - 1.110040I$	$2.81883 + 10.53640I$	0
$u = -1.36344 - 0.57413I$ $a = 0.81668 + 1.71870I$ $b = -0.686542 + 1.110040I$	$2.81883 - 10.53640I$	0
$u = 0.424899 + 0.205618I$ $a = 1.067090 - 0.216970I$ $b = 0.643871 + 0.623380I$	$1.27885 + 1.47875I$	$5.53375 - 2.68402I$
$u = 0.424899 - 0.205618I$ $a = 1.067090 + 0.216970I$ $b = 0.643871 - 0.623380I$	$1.27885 - 1.47875I$	$5.53375 + 2.68402I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.123469 + 0.432298I$ $a = 0.971527 - 0.185504I$ $b = 0.336621 - 1.039230I$	$1.44222 + 0.10917I$	$4.60096 + 0.74170I$
$u = 0.123469 - 0.432298I$ $a = 0.971527 + 0.185504I$ $b = 0.336621 + 1.039230I$	$1.44222 - 0.10917I$	$4.60096 - 0.74170I$
$u = -0.276422 + 0.340856I$ $a = 1.205550 + 0.069698I$ $b = 0.780050 - 0.899823I$	$4.11544 + 0.85046I$	$6.11573 - 1.78886I$
$u = -0.276422 - 0.340856I$ $a = 1.205550 - 0.069698I$ $b = 0.780050 + 0.899823I$	$4.11544 - 0.85046I$	$6.11573 + 1.78886I$
$u = -0.212788 + 0.372080I$ $a = 1.205710 - 0.009087I$ $b = 0.730879 - 0.999223I$	$3.70461 - 6.97242I$	$5.18722 + 5.39084I$
$u = -0.212788 - 0.372080I$ $a = 1.205710 + 0.009087I$ $b = 0.730879 + 0.999223I$	$3.70461 + 6.97242I$	$5.18722 - 5.39084I$
$u = -1.30421 + 0.88979I$ $a = 0.94760 - 1.13085I$ $b = -0.467146 - 0.945798I$	$-2.98311 + 3.49171I$	0
$u = -1.30421 - 0.88979I$ $a = 0.94760 + 1.13085I$ $b = -0.467146 + 0.945798I$	$-2.98311 - 3.49171I$	0
$u = 0.207285 + 0.315281I$ $a = 1.154330 - 0.015311I$ $b = 0.682752 + 0.937247I$	$0.91997 + 2.77577I$	$1.30667 - 1.85853I$
$u = 0.207285 - 0.315281I$ $a = 1.154330 + 0.015311I$ $b = 0.682752 - 0.937247I$	$0.91997 - 2.77577I$	$1.30667 + 1.85853I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.62344 + 0.10903I$ $a = 0.421703 + 1.264650I$ $b = -0.425694 + 0.762045I$	$0.77146 + 3.14468I$	0
$u = 1.62344 - 0.10903I$ $a = 0.421703 - 1.264650I$ $b = -0.425694 - 0.762045I$	$0.77146 - 3.14468I$	0
$u = 1.48787 + 0.67491I$ $a = 0.72782 + 1.35166I$ $b = -0.586014 + 0.941382I$	$2.49361 - 7.12682I$	0
$u = 1.48787 - 0.67491I$ $a = 0.72782 - 1.35166I$ $b = -0.586014 - 0.941382I$	$2.49361 + 7.12682I$	0
$u = 0.032839 + 0.299374I$ $a = 1.058460 + 0.071287I$ $b = 0.517309 + 0.978254I$	$-0.04044 + 2.94917I$	$3.38791 - 1.67057I$
$u = 0.032839 - 0.299374I$ $a = 1.058460 - 0.071287I$ $b = 0.517309 - 0.978254I$	$-0.04044 - 2.94917I$	$3.38791 + 1.67057I$
$u = -1.70082 + 0.27242I$ $a = 0.180150 + 1.217840I$ $b = -0.429150 + 0.914214I$	$-3.30551 - 1.68181I$	0
$u = -1.70082 - 0.27242I$ $a = 0.180150 - 1.217840I$ $b = -0.429150 - 0.914214I$	$-3.30551 + 1.68181I$	0
$u = 1.64495 + 0.53139I$ $a = 0.015327 - 1.035890I$ $b = -0.514628 - 0.947526I$	$0.05005 + 7.11615I$	0
$u = 1.64495 - 0.53139I$ $a = 0.015327 + 1.035890I$ $b = -0.514628 + 0.947526I$	$0.05005 - 7.11615I$	0

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^{120}+49u^{119}+\cdots+140u+1$
c_2, c_5	$u^{120}+u^{119}+\cdots+20u+1$
c_3	$u^{120}-15u^{119}+\cdots-620400u+166375$
c_4	$u^{120}+5u^{119}+\cdots-14u+1$
c_6, c_9	$u^{120}+u^{119}+\cdots+10u^3+1$
c_7	$u^{120}-5u^{119}+\cdots-1412636u+186749$
c_8, c_{12}	$u^{120}+5u^{119}+\cdots+2u+1$
c_{10}	$u^{120}-3u^{119}+\cdots-4u+1$
c_{11}	$u^{120}-61u^{119}+\cdots-10u^2+1$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^{120}+45y^{119}+\cdots+3100y+1$
c_2, c_5	$y^{120}+49y^{119}+\cdots+140y+1$
c_3	$y^{120}-71y^{119}+\cdots-1592489167500y+27680640625$
c_4	$y^{120}-87y^{119}+\cdots+408y+1$
c_6, c_9	$y^{120}-75y^{119}+\cdots-50y^2+1$
c_7	$y^{120}-67y^{119}+\cdots+1230496216784y+34875189001$
c_8, c_{12}	$y^{120}+61y^{119}+\cdots-10y^2+1$
c_{10}	$y^{120}+5y^{119}+\cdots-12y+1$
c_{11}	$y^{120}-3y^{119}+\cdots-20y+1$