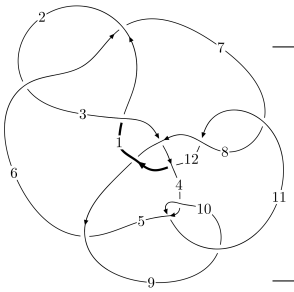
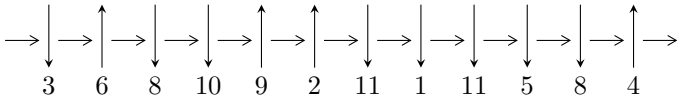
$12n_{0401}$ $(K12n_{0401})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 9.38926 \times 10^{46} u^{60} - 4.46475 \times 10^{46} u^{59} + \cdots + 4.27875 \times 10^{46} b - 7.71448 \times 10^{47}, \\ & - 5.92525 \times 10^{47} u^{60} + 3.42901 \times 10^{47} u^{59} + \cdots + 2.99512 \times 10^{47} a + 4.84559 \times 10^{48},\ u^{61} - u^{60} + \cdots - 4u + \\ I_2^u = \langle & u^{17} - 4u^{15} + 9u^{13} - 11u^{11} + u^{10} + 9u^9 - 3u^8 - 2u^7 + 4u^6 - 2u^5 - 2u^4 + 4u^3 + b - u, \\ & - 2u^{17} + u^{16} + 8u^{15} - 4u^{14} - 17u^{13} + 8u^{12} + 19u^{11} - 10u^{10} - 11u^9 + 10u^8 - 4u^7 - 6u^6 + 9u^5 - 5u^3 + 3u^2 \\ & u^{18} - 5u^{16} + 13u^{14} - 20u^{12} + u^{11} + 20u^{10} - 4u^9 - 11u^8 + 7u^7 + u^6 - 6u^5 + 4u^4 + 2u^3 - 3u^2 + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 79 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.

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$\boldsymbol{I_1^u = \langle 9.39\times10^{46}u^{60}-4.46\times10^{46}u^{59}+\cdots+4.28\times10^{46}b-7.71\times10^{47},\ -5.93\times10^{47}u^{60}+3.43\times10^{47}u^{59}+\cdots+3.00\times10^{47}a+4.85\times10^{48},\ u^{61}-u^{60}+\cdots-4u+7\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix}1\\0\end{pmatrix}$$

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

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

$$a_8 = \begin{pmatrix}1.97830u^{60}-1.14487u^{59}+\cdots-9.80742u-16.1783\\-2.19440u^{60}+1.04347u^{59}+\cdots+9.97369u+18.0298\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}2.02259u^{60}-1.64099u^{59}+\cdots-13.4590u-21.6582\\-0.378227u^{60}+0.935730u^{59}+\cdots+11.4450u+10.1138\end{pmatrix}$$

$$a_1 = \begin{pmatrix}1.64436u^{60}-0.705262u^{59}+\cdots-2.01406u-11.5444\\-0.378227u^{60}+0.935730u^{59}+\cdots+11.4450u+10.1138\end{pmatrix}$$

$$a_3 = \begin{pmatrix}-0.129915u^{60}+0.492637u^{59}+\cdots+13.1288u+10.6244\\-0.000539469u^{60}+0.281363u^{59}+\cdots+2.40949u+4.06086\end{pmatrix}$$

$$a_7 = \begin{pmatrix}2.95189u^{60}-1.23072u^{59}+\cdots-6.85929u-18.3643\\-2.29268u^{60}+0.793366u^{59}+\cdots+3.76139u+14.0016\end{pmatrix}$$

$$a_9 = \begin{pmatrix}u^3\\u^5-u^3+u\end{pmatrix}$$

$$a_6 = \begin{pmatrix}u^6-u^4+1\\u^8-2u^6+2u^4\end{pmatrix}$$

$$a_2 = \begin{pmatrix}0.888507u^{60}+0.465150u^{59}+\cdots+15.6860u+5.85422\\0.416055u^{60}-0.229418u^{59}+\cdots-3.73540u-1.33752\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 8.30801u^{60}+0.834443u^{59}+\cdots+12.8461u-49.4860$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{61} + 22u^{60} + \cdots - 10584u - 841$
c_2, c_6	$u^{61} - 2u^{60} + \cdots - 28u + 29$
c_3	$u^{61} - u^{60} + \cdots + 4065u + 1393$
c_4, c_{10}	$u^{61} - u^{60} + \cdots - 4u + 7$
c_5	$u^{61} - 3u^{60} + \cdots - 11403u + 4312$
c_7, c_{11}	$u^{61} + 36u^{59} + \cdots + 207224u + 19571$
c_8	$u^{61} + 3u^{60} + \cdots + 7u + 2$
c_9	$u^{61} + 27u^{60} + \cdots + 324u + 49$
c_{12}	$u^{61} + 7u^{60} + \cdots + 119062u + 4921$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{61} + 58y^{60} + \cdots + 53870952y - 707281$
c_2, c_6	$y^{61} + 22y^{60} + \cdots - 10584y - 841$
c_3	$y^{61} + 73y^{60} + \cdots - 72881301y - 1940449$
c_4, c_{10}	$y^{61} - 27y^{60} + \cdots + 324y - 49$
c_5	$y^{61} - 15y^{60} + \cdots + 131313385y - 18593344$
c_7, c_{11}	$y^{61} + 72y^{60} + \cdots + 1955728272y - 383024041$
c_8	$y^{61} - 7y^{60} + \cdots - 103y - 4$
c_9	$y^{61} + 21y^{60} + \cdots + 6192y - 2401$
c_{12}	$y^{61} - 73y^{60} + \cdots + 2203035738y - 24216241$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.544084+0.851164I$ $a=-0.22388-1.93031I$ $b=\ \ 0.31996+1.63955I$	$10.17730-2.63661I$	$-60.10+0.555426I$
$u=-0.544084-0.851164I$ $a=-0.22388+1.93031I$ $b=\ \ 0.31996-1.63955I$	$10.17730+2.63661I$	$-60.10-0.555426I$
$u=-0.445650+0.880720I$ $a=-0.00876+1.94137I$ $b=\ \ 0.04581-1.68414I$	$9.55356-1.38109I$	$-0.535194+0.791730I$
$u=-0.445650-0.880720I$ $a=-0.00876-1.94137I$ $b=\ \ 0.04581+1.68414I$	$9.55356+1.38109I$	$-0.535194-0.791730I$
$u=-0.857683+0.546154I$ $a=\ \ 1.75197+2.08794I$ $b=\ \ 0.12804-1.85121I$	$3.18673+2.19097I$	$-4.00000-2.72424I$
$u=-0.857683-0.546154I$ $a=\ \ 1.75197-2.08794I$ $b=\ \ 0.12804+1.85121I$	$3.18673-2.19097I$	$-4.00000+2.72424I$
$u=\ \ 0.463945+0.927138I$ $a=\ \ 0.17894-1.78063I$ $b=-0.37576+1.74010I$	$8.91602+9.59094I$	$-1.61071-4.50441I$
$u=\ \ 0.463945-0.927138I$ $a=\ \ 0.17894+1.78063I$ $b=-0.37576-1.74010I$	$8.91602-9.59094I$	$-1.61071+4.50441I$
$u=-0.761332+0.580831I$ $a=-1.49622-0.76431I$ $b=-0.367406+0.509362I$	$-0.006825-0.820615I$	$-2.91463-0.80498I$
$u=-0.761332-0.580831I$ $a=-1.49622+0.76431I$ $b=-0.367406-0.509362I$	$-0.006825+0.820615I$	$-2.91463+0.80498I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.937561 + 0.135130I$ $a = 0.78806 - 1.55480I$ $b = 0.864887 - 0.122377I$	$-3.52138 + 2.97859I$	$-11.18161 - 4.01114I$
$u = 0.937561 - 0.135130I$ $a = 0.78806 + 1.55480I$ $b = 0.864887 + 0.122377I$	$-3.52138 - 2.97859I$	$-11.18161 + 4.01114I$
$u = -0.905464 + 0.577132I$ $a = 0.426084 - 1.101300I$ $b = 0.231182 + 0.850599I$	$-0.44348 + 5.44090I$	$0. - 6.18247I$
$u = -0.905464 - 0.577132I$ $a = 0.426084 + 1.101300I$ $b = 0.231182 - 0.850599I$	$-0.44348 - 5.44090I$	$0. + 6.18247I$
$u = 0.725272 + 0.560786I$ $a = -0.721026 + 0.356999I$ $b = 0.552183 - 0.919955I$	$2.29564 - 1.22082I$	$0.17143 + 2.41236I$
$u = 0.725272 - 0.560786I$ $a = -0.721026 - 0.356999I$ $b = 0.552183 + 0.919955I$	$2.29564 + 1.22082I$	$0.17143 - 2.41236I$
$u = 0.570512 + 0.922531I$ $a = -0.20594 + 1.76543I$ $b = -0.02877 - 1.73498I$	$9.58894 - 4.78598I$	0
$u = 0.570512 - 0.922531I$ $a = -0.20594 - 1.76543I$ $b = -0.02877 + 1.73498I$	$9.58894 + 4.78598I$	0
$u = -0.612012 + 0.676924I$ $a = 0.762585 + 0.066634I$ $b = -1.25032 - 0.72018I$	$0.78856 - 3.53503I$	$-0.67914 + 4.86526I$
$u = -0.612012 - 0.676924I$ $a = 0.762585 - 0.066634I$ $b = -1.25032 + 0.72018I$	$0.78856 + 3.53503I$	$-0.67914 - 4.86526I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.972064 + 0.490213I$ $a = 2.15529 - 1.24439I$ $b = 0.639824 + 0.937890I$	$-2.42306 - 5.32854I$	0
$u = 0.972064 - 0.490213I$ $a = 2.15529 + 1.24439I$ $b = 0.639824 - 0.937890I$	$-2.42306 + 5.32854I$	0
$u = 0.912071 + 0.595227I$ $a = -0.550710 + 1.169500I$ $b = -0.814075 - 0.611211I$	$1.74431 - 3.44432I$	0
$u = 0.912071 - 0.595227I$ $a = -0.550710 - 1.169500I$ $b = -0.814075 + 0.611211I$	$1.74431 + 3.44432I$	0
$u = -1.027670 + 0.371040I$ $a = 0.144719 + 1.175400I$ $b = 0.518266 + 0.746154I$	$-3.01798 + 0.68032I$	0
$u = -1.027670 - 0.371040I$ $a = 0.144719 - 1.175400I$ $b = 0.518266 - 0.746154I$	$-3.01798 - 0.68032I$	0
$u = 0.794773 + 0.421843I$ $a = -0.03391 - 2.24073I$ $b = -0.398950 + 1.014180I$	$-1.69691 + 1.58278I$	$-7.41386 - 0.48848I$
$u = 0.794773 - 0.421843I$ $a = -0.03391 + 2.24073I$ $b = -0.398950 - 1.014180I$	$-1.69691 - 1.58278I$	$-7.41386 + 0.48848I$
$u = -1.060130 + 0.302950I$ $a = -0.104274 + 0.806163I$ $b = -0.063620 + 0.561834I$	$-2.67023 + 0.50890I$	0
$u = -1.060130 - 0.302950I$ $a = -0.104274 - 0.806163I$ $b = -0.063620 - 0.561834I$	$-2.67023 - 0.50890I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.778473 + 0.334352I$ $a = -0.994984 + 0.158157I$ $b = 0.123871 - 1.246270I$	$2.28478 - 1.44807I$	$0.58146 + 5.23010I$
$u = 0.778473 - 0.334352I$ $a = -0.994984 - 0.158157I$ $b = 0.123871 + 1.246270I$	$2.28478 + 1.44807I$	$0.58146 - 5.23010I$
$u = 0.875823 + 0.776386I$ $a = -1.08505 + 1.49485I$ $b = -0.17216 - 1.84671I$	$4.39723 - 2.92101I$	0
$u = 0.875823 - 0.776386I$ $a = -1.08505 - 1.49485I$ $b = -0.17216 + 1.84671I$	$4.39723 + 2.92101I$	0
$u = -1.009640 + 0.624975I$ $a = 0.47990 + 1.40571I$ $b = 1.42139 - 0.52111I$	$-0.40012 + 8.60462I$	0
$u = -1.009640 - 0.624975I$ $a = 0.47990 - 1.40571I$ $b = 1.42139 + 0.52111I$	$-0.40012 - 8.60462I$	0
$u = 1.198250 + 0.079684I$ $a = -0.330295 - 0.216625I$ $b = -0.12225 - 1.49577I$	$3.68795 - 1.11069I$	0
$u = 1.198250 - 0.079684I$ $a = -0.330295 + 0.216625I$ $b = -0.12225 + 1.49577I$	$3.68795 + 1.11069I$	0
$u = 1.086940 + 0.529361I$ $a = 1.111350 + 0.319218I$ $b = 0.067792 + 0.629900I$	$-1.14743 - 6.56312I$	0
$u = 1.086940 - 0.529361I$ $a = 1.111350 - 0.319218I$ $b = 0.067792 - 0.629900I$	$-1.14743 + 6.56312I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.136885+0.767965I$ $a=-0.557019-0.912726I$ $b=-0.121244+0.476633I$	$-2.55621+0.33359I$	$-6.44684+0.49435I$
$u=-0.136885-0.767965I$ $a=-0.557019+0.912726I$ $b=-0.121244-0.476633I$	$-2.55621-0.33359I$	$-6.44684-0.49435I$
$u=1.178220+0.412066I$ $a=0.728261-0.428533I$ $b=-0.188881+0.558152I$	$-6.30273-4.26546I$	0
$u=1.178220-0.412066I$ $a=0.728261+0.428533I$ $b=-0.188881-0.558152I$	$-6.30273+4.26546I$	0
$u=-1.077670+0.674826I$ $a=-1.70478-1.49229I$ $b=-0.41657+1.59039I$	$8.56121+8.31037I$	0
$u=-1.077670-0.674826I$ $a=-1.70478+1.49229I$ $b=-0.41657-1.59039I$	$8.56121-8.31037I$	0
$u=-1.283550+0.045302I$ $a=0.117042+0.330596I$ $b=0.24808+1.56716I$	$2.50815-6.87081I$	0
$u=-1.283550-0.045302I$ $a=0.117042-0.330596I$ $b=0.24808-1.56716I$	$2.50815+6.87081I$	0
$u=0.310681+0.623756I$ $a=-0.498140-0.161924I$ $b=0.017763+0.701512I$	$1.02214+2.04201I$	$1.04597-2.83641I$
$u=0.310681-0.623756I$ $a=-0.498140+0.161924I$ $b=0.017763-0.701512I$	$1.02214-2.04201I$	$1.04597+2.83641I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.203690+0.499462I$ $a=-0.111271-0.233894I$ $b=\ \ 0.117954+0.733032I$	$-5.69633+4.42131I$	0
$u=-1.203690-0.499462I$ $a=-0.111271+0.233894I$ $b=\ \ 0.117954-0.733032I$	$-5.69633-4.42131I$	0
$u=-1.134950+0.650042I$ $a=\ \ 1.64308+0.98161I$ $b=\ \ 0.05507-1.67770I$	$7.46478+7.04326I$	0
$u=-1.134950-0.650042I$ $a=\ \ 1.64308-0.98161I$ $b=\ \ 0.05507+1.67770I$	$7.46478-7.04326I$	0
$u=\ \ 1.096100+0.730179I$ $a=-1.46111+1.07505I$ $b=-0.11583-1.67692I$	$7.99251-1.27736I$	0
$u=\ \ 1.096100-0.730179I$ $a=-1.46111-1.07505I$ $b=-0.11583+1.67692I$	$7.99251+1.27736I$	0
$u=\ \ 1.142240+0.674079I$ $a=\ \ 1.67938-1.28751I$ $b=\ \ 0.47616+1.71273I$	$6.8432-15.4624I$	0
$u=\ \ 1.142240-0.674079I$ $a=\ \ 1.67938+1.28751I$ $b=\ \ 0.47616-1.71273I$	$6.8432+15.4624I$	0
$u=-0.653934$ $a=-0.815305$ $b=-0.427941$	-0.989818	-9.99130
$u=-0.155534+0.460253I$ $a=-0.400194-0.153253I$ $b=-0.678432+0.872645I$	$-0.59531+2.53206I$	$-1.68275-3.40674I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.155534-0.460253I$		
$a=-0.400194+0.153253I$	$-0.59531-2.53206I$	$-1.68275+3.40674I$
$b=-0.678432-0.872645I$		

II. $I_2^u =$
$\langle u^{17}-4u^{15}+\cdots+b-u,\ -2u^{17}+u^{16}+\cdots+3u^2+a,\ u^{18}-5u^{16}+\cdots-3u^2+1\rangle$

(i) Arc colorings

$$a_4 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_8 = \begin{pmatrix}2u^{17}-u^{16}+\cdots+5u^3-3u^2\\-u^{17}+4u^{15}+\cdots-4u^3+u\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-u^{16}-u^{15}+\cdots-4u+2\\-u^{16}+5u^{14}+\cdots+u+1\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-2u^{16}-u^{15}+\cdots-3u+3\\-u^{16}+5u^{14}+\cdots+u+1\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-2u^{17}+9u^{15}+\cdots+2u-1\\-u^{16}+5u^{14}+\cdots-3u^2+2\end{pmatrix}$$
$$a_7 = \begin{pmatrix}2u^{17}-2u^{16}+\cdots-4u^2+u\\-u^{17}+4u^{15}+\cdots-2u^2+1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}u^3\\u^5-u^3+u\end{pmatrix}$$
$$a_6 = \begin{pmatrix}u^6-u^4+1\\u^8-2u^6+2u^4\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-4u^{17}+18u^{15}+\cdots+4u-2\\-u^{16}+5u^{14}+\cdots+u+2\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -5u^{17}+5u^{16}+21u^{15}-24u^{14}-48u^{13}+58u^{12}+64u^{11}-85u^{10}-51u^9+83u^8-u^7-45u^6+41u^5+3u^4-37u^3+15u^2+7u-15$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 11u^{17} + \cdots - 18u + 1$
c_2	$u^{18} - u^{17} + \cdots + 9u^2 + 1$
c_3	$u^{18} + 9u^{16} + \cdots + u + 1$
c_4	$u^{18} - 5u^{16} + \cdots - 3u^2 + 1$
c_5	$u^{18} + 3u^{16} + \cdots - 3u^2 + 1$
c_6	$u^{18} + u^{17} + \cdots + 9u^2 + 1$
c_7	$u^{18} + u^{17} + \cdots + 2u + 1$
c_8	$u^{18} + 2u^{17} + \cdots + u + 1$
c_9	$u^{18} - 10u^{17} + \cdots - 6u + 1$
c_{10}	$u^{18} - 5u^{16} + \cdots - 3u^2 + 1$
c_{11}	$u^{18} - u^{17} + \cdots - 2u + 1$
c_{12}	$u^{18} + 5u^{15} + \cdots + 8u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} + 15y^{17} + \cdots - 34y + 1$
c_2, c_6	$y^{18} + 11y^{17} + \cdots + 18y + 1$
c_3	$y^{18} + 18y^{17} + \cdots + 11y + 1$
c_4, c_{10}	$y^{18} - 10y^{17} + \cdots - 6y + 1$
c_5	$y^{18} + 6y^{17} + \cdots - 6y + 1$
c_7, c_{11}	$y^{18} - 7y^{17} + \cdots - 10y + 1$
c_8	$y^{18} - 10y^{17} + \cdots - 7y + 1$
c_9	$y^{18} + 2y^{17} + \cdots - 2y + 1$
c_{12}	$y^{18} - 4y^{16} + \cdots + 16y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.904746 + 0.245141I$ $a = -1.270110 + 0.303445I$ $b = 0.07442 - 1.44586I$	$1.62879 - 1.07876I$	$-10.54525 - 0.48529I$
$u = 0.904746 - 0.245141I$ $a = -1.270110 - 0.303445I$ $b = 0.07442 + 1.44586I$	$1.62879 + 1.07876I$	$-10.54525 + 0.48529I$
$u = -1.016240 + 0.389137I$ $a = 0.74048 - 1.68593I$ $b = -0.332136 - 0.610814I$	$-3.05100 - 0.53837I$	$-10.07570 + 2.70036I$
$u = -1.016240 - 0.389137I$ $a = 0.74048 + 1.68593I$ $b = -0.332136 + 0.610814I$	$-3.05100 + 0.53837I$	$-10.07570 - 2.70036I$
$u = -0.881768 + 0.726056I$ $a = 1.25651 + 1.55510I$ $b = 0.14317 - 1.92438I$	$4.79527 + 2.77083I$	$5.95842 - 0.39060I$
$u = -0.881768 - 0.726056I$ $a = 1.25651 - 1.55510I$ $b = 0.14317 + 1.92438I$	$4.79527 - 2.77083I$	$5.95842 + 0.39060I$
$u = 1.037690 + 0.534998I$ $a = -1.356060 - 0.091628I$ $b = -0.463536 - 0.533807I$	$-1.99612 - 6.79726I$	$-10.09948 + 9.44320I$
$u = 1.037690 - 0.534998I$ $a = -1.356060 + 0.091628I$ $b = -0.463536 + 0.533807I$	$-1.99612 + 6.79726I$	$-10.09948 - 9.44320I$
$u = 0.551142 + 0.552499I$ $a = 0.792707 + 0.203931I$ $b = 0.528191 - 0.635299I$	$-0.49089 + 2.36719I$	$-4.89133 - 3.88006I$
$u = 0.551142 - 0.552499I$ $a = 0.792707 - 0.203931I$ $b = 0.528191 + 0.635299I$	$-0.49089 - 2.36719I$	$-4.89133 + 3.88006I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.098568 + 0.770121I$ $a = -0.013002 - 1.254100I$ $b = 0.425202 + 0.943436I$	$-2.33749 - 1.65920I$	$-4.80081 + 3.98111I$
$u = 0.098568 - 0.770121I$ $a = -0.013002 + 1.254100I$ $b = 0.425202 - 0.943436I$	$-2.33749 + 1.65920I$	$-4.80081 - 3.98111I$
$u = -0.703037 + 0.218633I$ $a = -1.90319 + 0.73681I$ $b = 0.332995 - 0.720155I$	$-1.74343 + 3.40184I$	$-6.62172 - 4.93370I$
$u = -0.703037 - 0.218633I$ $a = -1.90319 - 0.73681I$ $b = 0.332995 + 0.720155I$	$-1.74343 - 3.40184I$	$-6.62172 + 4.93370I$
$u = -1.194980 + 0.426737I$ $a = -0.839889 - 0.604413I$ $b = -0.331200 + 0.919578I$	$-6.02412 + 5.77721I$	$-9.54886 - 8.25145I$
$u = -1.194980 - 0.426737I$ $a = -0.839889 + 0.604413I$ $b = -0.331200 - 0.919578I$	$-6.02412 - 5.77721I$	$-9.54886 + 8.25145I$
$u = 1.203880 + 0.487334I$ $a = 0.592561 + 0.052274I$ $b = -0.377110 + 1.031540I$	$-5.58543 - 3.01264I$	$-6.87525 - 0.89912I$
$u = 1.203880 - 0.487334I$ $a = 0.592561 - 0.052274I$ $b = -0.377110 - 1.031540I$	$-5.58543 + 3.01264I$	$-6.87525 + 0.89912I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-11u^{17}+\cdots-18u+1)(u^{61}+22u^{60}+\cdots-10584u-841)$
c_2	$(u^{18}-u^{17}+\cdots+9u^2+1)(u^{61}-2u^{60}+\cdots-28u+29)$
c_3	$(u^{18}+9u^{16}+\cdots+u+1)(u^{61}-u^{60}+\cdots+4065u+1393)$
c_4	$(u^{18}-5u^{16}+\cdots-3u^2+1)(u^{61}-u^{60}+\cdots-4u+7)$
c_5	$(u^{18}+3u^{16}+\cdots-3u^2+1)(u^{61}-3u^{60}+\cdots-11403u+4312)$
c_6	$(u^{18}+u^{17}+\cdots+9u^2+1)(u^{61}-2u^{60}+\cdots-28u+29)$
c_7	$(u^{18}+u^{17}+\cdots+2u+1)(u^{61}+36u^{59}+\cdots+207224u+19571)$
c_8	$(u^{18}+2u^{17}+\cdots+u+1)(u^{61}+3u^{60}+\cdots+7u+2)$
c_9	$(u^{18}-10u^{17}+\cdots-6u+1)(u^{61}+27u^{60}+\cdots+324u+49)$
c_{10}	$(u^{18}-5u^{16}+\cdots-3u^2+1)(u^{61}-u^{60}+\cdots-4u+7)$
c_{11}	$(u^{18}-u^{17}+\cdots-2u+1)(u^{61}+36u^{59}+\cdots+207224u+19571)$
c_{12}	$(u^{18}+5u^{15}+\cdots+8u^2+1)(u^{61}+7u^{60}+\cdots+119062u+4921)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}+15y^{17}+\cdots-34y+1)$ $\cdot(y^{61}+58y^{60}+\cdots+53870952y-707281)$
c_2, c_6	$(y^{18}+11y^{17}+\cdots+18y+1)(y^{61}+22y^{60}+\cdots-10584y-841)$
c_3	$(y^{18}+18y^{17}+\cdots+11y+1)$ $\cdot(y^{61}+73y^{60}+\cdots-72881301y-1940449)$
c_4, c_{10}	$(y^{18}-10y^{17}+\cdots-6y+1)(y^{61}-27y^{60}+\cdots+324y-49)$
c_5	$(y^{18}+6y^{17}+\cdots-6y+1)$ $\cdot(y^{61}-15y^{60}+\cdots+131313385y-18593344)$
c_7, c_{11}	$(y^{18}-7y^{17}+\cdots-10y+1)$ $\cdot(y^{61}+72y^{60}+\cdots+1955728272y-383024041)$
c_8	$(y^{18}-10y^{17}+\cdots-7y+1)(y^{61}-7y^{60}+\cdots-103y-4)$
c_9	$(y^{18}+2y^{17}+\cdots-2y+1)(y^{61}+21y^{60}+\cdots+6192y-2401)$
c_{12}	$(y^{18}-4y^{16}+\cdots+16y+1)$ $\cdot(y^{61}-73y^{60}+\cdots+2203035738y-24216241)$