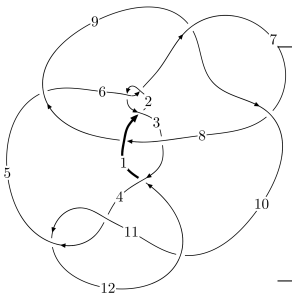
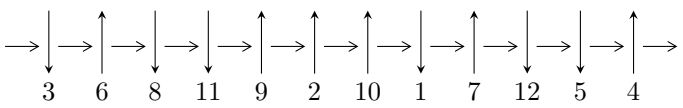
$12a_{0333}$ ($K12a_{0333}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$I_1^u = \langle 1.20734 \times 10^{126} u^{119} + 2.46333 \times 10^{126} u^{118} + \cdots + 3.54053 \times 10^{125} b + 4.43052 \times 10^{125},$
$3.79147 \times 10^{125} u^{119} + 1.43350 \times 10^{125} u^{118} + \cdots + 3.54053 \times 10^{125} a - 4.94486 \times 10^{125},\ u^{120} + 3u^{119} + \cdots +$

* 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. $\boldsymbol{I_1^u = \langle 1.21 \times 10^{126} u^{119} + 2.46 \times 10^{126} u^{118} + \cdots + 3.54 \times 10^{125} b + 4.43 \times 10^{125},\ 3.79 \times 10^{125} u^{119} + 1.43 \times 10^{125} u^{118} + \cdots + 3.54 \times 10^{125} a - 4.94 \times 10^{125},\ u^{120} + 3u^{119} + \cdots + 2u + 1 \rangle}$

(i) Arc colorings

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

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

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

$$a_{12} = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} -1.07088u^{119} - 0.404884u^{118} + \cdots - 1.06912u + 1.39664 \\ -3.41004u^{119} - 6.95753u^{118} + \cdots - 4.08476u - 1.25137 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.10879u^{119} - 0.667261u^{118} + \cdots - 1.24150u + 1.18917 \\ -3.20538u^{119} - 6.69967u^{118} + \cdots - 4.21800u - 1.27669 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -6.11682u^{119} - 9.64072u^{118} + \cdots - 0.615382u - 3.46092 \\ -4.22643u^{119} - 6.06316u^{118} + \cdots + 5.77722u - 1.25101 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 9.55745u^{119} + 15.8859u^{118} + \cdots + 8.75147u + 4.29676 \\ 4.22090u^{119} + 7.00859u^{118} + \cdots + 16.1434u + 8.70903 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 11.4755u^{119} + 27.6957u^{118} + \cdots + 10.6546u + 7.38802 \\ 2.78667u^{119} + 10.9141u^{118} + \cdots + 11.1166u + 3.67666 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.49406u^{119} - 1.43715u^{118} + \cdots - 1.45193u + 0.634651 \\ -4.21529u^{119} - 8.96618u^{118} + \cdots - 7.00577u - 1.78600 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.73851u^{119} - 7.21969u^{118} + \cdots - 14.7819u - 2.34006$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{120} + 45u^{119} + \cdots - 34u^2 + 1$
c_2, c_6	$u^{120} - u^{119} + \cdots - 6u^3 + 1$
c_3	$u^{120} - 49u^{119} + \cdots - 10414u + 557$
c_4, c_{11}	$u^{120} + 3u^{119} + \cdots + 2u + 1$
c_5	$u^{120} + 45u^{119} + \cdots + 7856120u + 971617$
c_7, c_9	$u^{120} + u^{119} + \cdots + 28u + 1$
c_8	$u^{120} + 5u^{119} + \cdots + 12u + 1$
c_{10}	$u^{120} + 59u^{119} + \cdots + 6u^2 + 1$
c_{12}	$u^{120} + 9u^{119} + \cdots - 404318u + 65969$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{120}+61y^{119}+\cdots-68y+1$
c_2, c_6	$y^{120}+45y^{119}+\cdots-34y^2+1$
c_3	$y^{120}-603y^{119}+\cdots-24727612y+310249$
c_4, c_{11}	$y^{120}-59y^{119}+\cdots+6y^2+1$
c_5	$y^{120}-639y^{119}+\cdots-56197112480332y+944039594689$
c_7, c_9	$y^{120}-79y^{119}+\cdots+108y+1$
c_8	$y^{120}-3y^{119}+\cdots-60y+1$
c_{10}	$y^{120}+5y^{119}+\cdots+12y+1$
c_{12}	$y^{120}+49y^{119}+\cdots-260893161688y+4351908961$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.979856+0.344337I$ $a=\ \ 1.09366+0.96908I$ $b=-0.363071+0.138763I$	$0.62225-3.02138I$	0
$u=-0.979856-0.344337I$ $a=\ \ 1.09366-0.96908I$ $b=-0.363071-0.138763I$	$0.62225+3.02138I$	0
$u=\ \ 0.324737+0.902702I$ $a=\ \ 0.276812+0.016151I$ $b=\ \ 0.489944-0.577252I$	$4.18323+3.09968I$	0
$u=\ \ 0.324737-0.902702I$ $a=\ \ 0.276812-0.016151I$ $b=\ \ 0.489944+0.577252I$	$4.18323-3.09968I$	0
$u=-0.171558+0.943685I$ $a=-0.193763-0.269957I$ $b=\ \ 0.112001-0.316899I$	$1.92595+3.80713I$	0
$u=-0.171558-0.943685I$ $a=-0.193763+0.269957I$ $b=\ \ 0.112001+0.316899I$	$1.92595-3.80713I$	0
$u=-0.761541+0.710272I$ $a=-0.529374-0.492267I$ $b=-0.672411+1.215670I$	$6.12981+11.58910I$	0
$u=-0.761541-0.710272I$ $a=-0.529374+0.492267I$ $b=-0.672411-1.215670I$	$6.12981-11.58910I$	0
$u=\ \ 0.767501+0.722782I$ $a=\ \ 0.575940-0.354501I$ $b=\ \ 0.498118+1.157700I$	$7.84829-5.50381I$	0
$u=\ \ 0.767501-0.722782I$ $a=\ \ 0.575940+0.354501I$ $b=\ \ 0.498118-1.157700I$	$7.84829+5.50381I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.976991 + 0.397527I$ $a = -1.28088 + 0.80343I$ $b = 0.254492 - 0.367447I$	$1.34359 - 1.89187I$	0
$u = 0.976991 - 0.397527I$ $a = -1.28088 - 0.80343I$ $b = 0.254492 + 0.367447I$	$1.34359 + 1.89187I$	0
$u = -0.677820 + 0.808170I$ $a = -0.197815 - 0.094008I$ $b = -0.528005 + 0.471225I$	$0.18750 + 3.33247I$	0
$u = -0.677820 - 0.808170I$ $a = -0.197815 + 0.094008I$ $b = -0.528005 - 0.471225I$	$0.18750 - 3.33247I$	0
$u = -1.05515$ $a = -1.05269$ $b = -0.630172$	-1.68544	0
$u = -0.834199 + 0.699354I$ $a = -0.954568 + 0.410532I$ $b = 0.467867 + 1.072280I$	$5.92230 - 6.26866I$	0
$u = -0.834199 - 0.699354I$ $a = -0.954568 - 0.410532I$ $b = 0.467867 - 1.072280I$	$5.92230 + 6.26866I$	0
$u = -0.813951 + 0.398465I$ $a = -0.429377 + 1.103900I$ $b = 0.160266 + 0.083993I$	$-1.81976 + 1.21553I$	0
$u = -0.813951 - 0.398465I$ $a = -0.429377 - 1.103900I$ $b = 0.160266 - 0.083993I$	$-1.81976 - 1.21553I$	0
$u = 0.831410 + 0.719173I$ $a = 0.820300 + 0.252864I$ $b = -0.264529 + 1.037440I$	$7.66835 + 0.09297I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.831410 - 0.719173I$ $a = 0.820300 - 0.252864I$ $b = -0.264529 - 1.037440I$	$7.66835 - 0.09297I$	0
$u = 0.290332 + 0.844265I$ $a = 0.412571 + 0.243861I$ $b = 0.96998 - 1.22147I$	$5.15191 + 8.18955I$	0
$u = 0.290332 - 0.844265I$ $a = 0.412571 - 0.243861I$ $b = 0.96998 + 1.22147I$	$5.15191 - 8.18955I$	0
$u = -0.316699 + 0.831772I$ $a = -0.260078 + 0.219002I$ $b = -1.115100 - 0.753088I$	$-1.89051 - 6.35992I$	0
$u = -0.316699 - 0.831772I$ $a = -0.260078 - 0.219002I$ $b = -1.115100 + 0.753088I$	$-1.89051 + 6.35992I$	0
$u = 1.089150 + 0.234904I$ $a = 1.80307 + 0.24588I$ $b = 1.018600 + 0.404078I$	$-4.15140 - 4.50015I$	0
$u = 1.089150 - 0.234904I$ $a = 1.80307 - 0.24588I$ $b = 1.018600 - 0.404078I$	$-4.15140 + 4.50015I$	0
$u = -0.286154 + 0.838179I$ $a = -0.415933 + 0.302299I$ $b = -1.12271 - 1.31896I$	$3.4719 - 14.1532I$	0
$u = -0.286154 - 0.838179I$ $a = -0.415933 - 0.302299I$ $b = -1.12271 + 1.31896I$	$3.4719 + 14.1532I$	0
$u = -0.698078 + 0.518282I$ $a = -0.00357 + 1.74069I$ $b = 0.684357 - 0.598030I$	$1.02759 + 6.71407I$	$0. - 9.53783I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.698078-0.518282I$ $a=-0.00357-1.74069I$ $b=\ \ 0.684357+0.598030I$	$1.02759-6.71407I$	$0.+9.53783I$
$u=\ \ 1.044660+0.435012I$ $a=-2.23762+0.53331I$ $b=-0.719465-1.126900I$	$-0.02482-2.22257I$	0
$u=\ \ 1.044660-0.435012I$ $a=-2.23762-0.53331I$ $b=-0.719465+1.126900I$	$-0.02482+2.22257I$	0
$u=\ \ 1.020500+0.498431I$ $a=-0.652839+0.488485I$ $b=\ \ 0.092070-1.215700I$	$3.23486-0.38929I$	0
$u=\ \ 1.020500-0.498431I$ $a=-0.652839-0.488485I$ $b=\ \ 0.092070+1.215700I$	$3.23486+0.38929I$	0
$u=-1.076580+0.378949I$ $a=\ \ 1.15257+1.55328I$ $b=\ \ 0.769790+0.474045I$	$-2.77897+1.18278I$	0
$u=-1.076580-0.378949I$ $a=\ \ 1.15257-1.55328I$ $b=\ \ 0.769790-0.474045I$	$-2.77897-1.18278I$	0
$u=-1.032920+0.505731I$ $a=\ \ 0.245975+0.413112I$ $b=-0.073973-1.102930I$	$3.37682+5.48598I$	0
$u=-1.032920-0.505731I$ $a=\ \ 0.245975-0.413112I$ $b=-0.073973+1.102930I$	$3.37682-5.48598I$	0
$u=-1.091040+0.431738I$ $a=\ \ 4.85889+5.71513I$ $b=\ \ 4.89829+0.38098I$	$-1.02292+5.65821I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.091040-0.431738I$ $a=\ \ 4.85889-5.71513I$ $b=\ \ 4.89829-0.38098I$	$-1.02292-5.65821I$	0
$u=\ \ 0.660166+0.493992I$ $a=-0.29803+1.59123I$ $b=-0.445578-0.769412I$	$2.13373-1.83530I$	$5.17783+4.58003I$
$u=\ \ 0.660166-0.493992I$ $a=-0.29803-1.59123I$ $b=-0.445578+0.769412I$	$2.13373+1.83530I$	$5.17783-4.58003I$
$u=-1.131570+0.329651I$ $a=\ \ 1.19322+0.96903I$ $b=\ \ 0.869209+0.761560I$	$-3.37533+0.37024I$	0
$u=-1.131570-0.329651I$ $a=\ \ 1.19322-0.96903I$ $b=\ \ 0.869209-0.761560I$	$-3.37533-0.37024I$	0
$u=-1.075110+0.492379I$ $a=-1.13838-1.46213I$ $b=-1.27344-0.72132I$	$0.47500+4.53395I$	0
$u=-1.075110-0.492379I$ $a=-1.13838+1.46213I$ $b=-1.27344+0.72132I$	$0.47500-4.53395I$	0
$u=\ \ 1.141380+0.312790I$ $a=-1.40861+0.91446I$ $b=-1.054980+0.838300I$	$-4.89679+4.65011I$	0
$u=\ \ 1.141380-0.312790I$ $a=-1.40861-0.91446I$ $b=-1.054980-0.838300I$	$-4.89679-4.65011I$	0
$u=\ \ 1.096310+0.460123I$ $a=\ \ 11.4019-26.8572I$ $b=\ \ 19.2908-7.8522I$	$-0.82002-1.64527I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.096310 - 0.460123I$ $a = 11.4019 + 26.8572I$ $b = 19.2908 + 7.8522I$	$-0.82002 + 1.64527I$	0
$u = -1.18948$ $a = -0.950978$ $b = -0.616281$	-1.66019	0
$u = -0.702662 + 0.388268I$ $a = 0.601372 + 0.300948I$ $b = -1.097330 - 0.318766I$	$0.79969 - 2.86212I$	$1.25285 + 0.98098I$
$u = -0.702662 - 0.388268I$ $a = 0.601372 - 0.300948I$ $b = -1.097330 + 0.318766I$	$0.79969 + 2.86212I$	$1.25285 - 0.98098I$
$u = -1.115540 + 0.439696I$ $a = -0.398178 + 1.288090I$ $b = 0.419244 + 0.947562I$	$-2.49083 + 1.59231I$	0
$u = -1.115540 - 0.439696I$ $a = -0.398178 - 1.288090I$ $b = 0.419244 - 0.947562I$	$-2.49083 - 1.59231I$	0
$u = -1.079350 + 0.524191I$ $a = -1.81683 + 0.14134I$ $b = -0.255130 + 0.176076I$	$2.54525 + 4.64503I$	0
$u = -1.079350 - 0.524191I$ $a = -1.81683 - 0.14134I$ $b = -0.255130 - 0.176076I$	$2.54525 - 4.64503I$	0
$u = 1.087490 + 0.528401I$ $a = 2.14413 + 0.14776I$ $b = 0.246410 + 0.487523I$	$2.02256 - 9.76114I$	0
$u = 1.087490 - 0.528401I$ $a = 2.14413 - 0.14776I$ $b = 0.246410 - 0.487523I$	$2.02256 + 9.76114I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.189370 + 0.223697I$ $a = 1.58163 - 0.92063I$ $b = 1.206410 - 0.458400I$	$-6.80677 + 3.25920I$	0
$u = 1.189370 - 0.223697I$ $a = 1.58163 + 0.92063I$ $b = 1.206410 + 0.458400I$	$-6.80677 - 3.25920I$	0
$u = 1.108750 + 0.499251I$ $a = 2.74289 - 0.03774I$ $b = 1.07835 + 1.19608I$	$-1.91179 - 6.14484I$	0
$u = 1.108750 - 0.499251I$ $a = 2.74289 + 0.03774I$ $b = 1.07835 - 1.19608I$	$-1.91179 + 6.14484I$	0
$u = 1.171060 + 0.335117I$ $a = -1.159990 + 0.458730I$ $b = -1.006160 + 0.414342I$	$-8.24695 - 1.94958I$	0
$u = 1.171060 - 0.335117I$ $a = -1.159990 - 0.458730I$ $b = -1.006160 - 0.414342I$	$-8.24695 + 1.94958I$	0
$u = 1.124950 + 0.491772I$ $a = 1.90026 + 0.59809I$ $b = 0.396104 + 1.286160I$	$-2.00613 - 6.04917I$	0
$u = 1.124950 - 0.491772I$ $a = 1.90026 - 0.59809I$ $b = 0.396104 - 1.286160I$	$-2.00613 + 6.04917I$	0
$u = -0.197792 + 0.745397I$ $a = 0.138326 - 0.760120I$ $b = 0.722850 + 0.496843I$	$-4.20426 - 1.55011I$	$-5.15713 + 0.81242I$
$u = -0.197792 - 0.745397I$ $a = 0.138326 + 0.760120I$ $b = 0.722850 - 0.496843I$	$-4.20426 + 1.55011I$	$-5.15713 - 0.81242I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.251363+0.728534I$ $a=\ 0.451399-1.047470I$ $b=\ 0.876667+0.901266I$	$-0.82094-7.82039I$	$0.42967+7.46898I$
$u=-0.251363-0.728534I$ $a=\ 0.451399+1.047470I$ $b=\ 0.876667-0.901266I$	$-0.82094+7.82039I$	$0.42967-7.46898I$
$u=\ 1.215830+0.248185I$ $a=\ 1.31511-1.65542I$ $b=\ 1.17340-1.08861I$	$-1.37922+10.80190I$	0
$u=\ 1.215830-0.248185I$ $a=\ 1.31511+1.65542I$ $b=\ 1.17340+1.08861I$	$-1.37922-10.80190I$	0
$u=-1.221170+0.241017I$ $a=-1.14573-1.47695I$ $b=-0.998601-0.982734I$	$0.23902-4.83774I$	0
$u=-1.221170-0.241017I$ $a=-1.14573+1.47695I$ $b=-0.998601+0.982734I$	$0.23902+4.83774I$	0
$u=\ 0.512274+0.551955I$ $a=-1.57519+1.38221I$ $b=-0.070032-1.058420I$	$4.72396-3.86670I$	$8.43902+6.01110I$
$u=\ 0.512274-0.551955I$ $a=-1.57519-1.38221I$ $b=-0.070032+1.058420I$	$4.72396+3.86670I$	$8.43902-6.01110I$
$u=\ 1.134080+0.527150I$ $a=\ 2.11224-0.65937I$ $b=\ 0.780407+1.013240I$	$-2.01212-7.48043I$	0
$u=\ 1.134080-0.527150I$ $a=\ 2.11224+0.65937I$ $b=\ 0.780407-1.013240I$	$-2.01212+7.48043I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.246230 + 0.704413I$ $a = -0.567715 - 0.854711I$ $b = -0.698995 + 0.907309I$	$0.53863 + 2.78783I$	$2.73261 - 2.99922I$
$u = \ 0.246230 - 0.704413I$ $a = -0.567715 + 0.854711I$ $b = -0.698995 - 0.907309I$	$0.53863 - 2.78783I$	$2.73261 + 2.99922I$
$u = -1.138730 + 0.533845I$ $a = -2.12484 - 0.95345I$ $b = -0.909882 + 1.018810I$	$-3.38807 + 12.59600I$	0
$u = -1.138730 - 0.533845I$ $a = -2.12484 + 0.95345I$ $b = -0.909882 - 1.018810I$	$-3.38807 - 12.59600I$	0
$u = -0.482895 + 0.559197I$ $a = \ 1.71895 + 1.14574I$ $b = \ 0.026055 - 0.870208I$	$4.98517 - 1.18092I$	$9.24677 + 0.95822I$
$u = -0.482895 - 0.559197I$ $a = \ 1.71895 - 1.14574I$ $b = \ 0.026055 + 0.870208I$	$4.98517 + 1.18092I$	$9.24677 - 0.95822I$
$u = -1.153890 + 0.521665I$ $a = -1.42018 - 0.79912I$ $b = -0.766400 + 0.701073I$	$-6.96693 + 6.28883I$	0
$u = -1.153890 - 0.521665I$ $a = -1.42018 + 0.79912I$ $b = -0.766400 - 0.701073I$	$-6.96693 - 6.28883I$	0
$u = \ 0.354503 + 0.633986I$ $a = -1.71274 - 0.26068I$ $b = -0.106565 + 0.669466I$	$4.13174 + 5.19741I$	$6.94261 - 6.82308I$
$u = \ 0.354503 - 0.633986I$ $a = -1.71274 + 0.26068I$ $b = -0.106565 - 0.669466I$	$4.13174 - 5.19741I$	$6.94261 + 6.82308I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.372449+0.615008I$ $a=\ \ 1.78118+0.00872I$ $b=\ \ 0.087025+0.391314I$	$4.58226-0.13777I$	$8.52333+0.22552I$
$u=-0.372449-0.615008I$ $a=\ \ 1.78118-0.00872I$ $b=\ \ 0.087025-0.391314I$	$4.58226+0.13777I$	$8.52333-0.22552I$
$u=-1.155470+0.581160I$ $a=\ \ 1.96263+0.83303I$ $b=\ \ 1.25986-0.82885I$	$-4.39767+11.60140I$	0
$u=-1.155470-0.581160I$ $a=\ \ 1.96263-0.83303I$ $b=\ \ 1.25986+0.82885I$	$-4.39767-11.60140I$	0
$u=\ \ 0.580824+0.398636I$ $a=-0.684279+0.948142I$ $b=\ \ 0.114790-1.099190I$	$1.47406-1.29391I$	$5.74032+3.73465I$
$u=\ \ 0.580824-0.398636I$ $a=-0.684279-0.948142I$ $b=\ \ 0.114790+1.099190I$	$1.47406+1.29391I$	$5.74032-3.73465I$
$u=\ \ 0.657098+0.253914I$ $a=-0.678281+0.458482I$ $b=\ \ 1.47795-0.86919I$	$1.54917-1.60121I$	$4.61531+10.34510I$
$u=\ \ 0.657098-0.253914I$ $a=-0.678281-0.458482I$ $b=\ \ 1.47795+0.86919I$	$1.54917+1.60121I$	$4.61531-10.34510I$
$u=\ \ 1.249640+0.348443I$ $a=-0.569455-0.369945I$ $b=-0.528300-0.241301I$	$-2.64160-8.04873I$	0
$u=\ \ 1.249640-0.348443I$ $a=-0.569455+0.369945I$ $b=-0.528300+0.241301I$	$-2.64160+8.04873I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.165610+0.574178I$ $a=\ \ 2.57578+0.44640I$ $b=\ \ 1.23887-1.38107I$	$0.8486+19.3744I$	0
$u=-1.165610-0.574178I$ $a=\ \ 2.57578-0.44640I$ $b=\ \ 1.23887+1.38107I$	$0.8486-19.3744I$	0
$u=\ \ 1.166220+0.577344I$ $a=-2.35979+0.34738I$ $b=-1.09116-1.27325I$	$2.53534-13.43940I$	0
$u=\ \ 1.166220-0.577344I$ $a=-2.35979-0.34738I$ $b=-1.09116+1.27325I$	$2.53534+13.43940I$	0
$u=-1.127840+0.672415I$ $a=\ \ 0.479675+0.571724I$ $b=\ \ 0.562659-0.013712I$	$-1.20667+2.55074I$	0
$u=-1.127840-0.672415I$ $a=\ \ 0.479675-0.571724I$ $b=\ \ 0.562659+0.013712I$	$-1.20667-2.55074I$	0
$u=\ \ 1.167230+0.601982I$ $a=-1.355330+0.313289I$ $b=-0.706384-0.633643I$	$1.63424-8.58607I$	0
$u=\ \ 1.167230-0.601982I$ $a=-1.355330-0.313289I$ $b=-0.706384+0.633643I$	$1.63424+8.58607I$	0
$u=\ \ 0.238439+0.601148I$ $a=-0.727069-0.121720I$ $b=-0.562859+1.111690I$	$0.51776+1.80280I$	$1.24484-3.47897I$
$u=\ \ 0.238439-0.601148I$ $a=-0.727069+0.121720I$ $b=-0.562859-1.111690I$	$0.51776-1.80280I$	$1.24484+3.47897I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.315898+0.557333I$ $a=\ \ 0.160259+0.076062I$ $b=-0.770851+0.634078I$	$-0.23503+2.29897I$	$-0.63836-2.70248I$
$u=-0.315898-0.557333I$ $a=\ \ 0.160259-0.076062I$ $b=-0.770851-0.634078I$	$-0.23503-2.29897I$	$-0.63836+2.70248I$
$u=-1.291920+0.450579I$ $a=\ \ 0.164348-0.255157I$ $b=\ \ 0.1118940-0.0654741I$	$-1.76459+1.56088I$	0
$u=-1.291920-0.450579I$ $a=\ \ 0.164348+0.255157I$ $b=\ \ 0.1118940+0.0654741I$	$-1.76459-1.56088I$	0
$u=\ \ 0.201608+0.592090I$ $a=-0.412818-0.058276I$ $b=-0.071919+1.206460I$	$0.56650+1.75323I$	$2.28628-3.72791I$
$u=\ \ 0.201608-0.592090I$ $a=-0.412818+0.058276I$ $b=-0.071919-1.206460I$	$0.56650-1.75323I$	$2.28628+3.72791I$
$u=-0.364944+0.500940I$ $a=\ \ 1.244650+0.541319I$ $b=\ \ 1.070820-0.337080I$	$2.51480-0.38256I$	$2.40649-1.68541I$
$u=-0.364944-0.500940I$ $a=\ \ 1.244650-0.541319I$ $b=\ \ 1.070820+0.337080I$	$2.51480+0.38256I$	$2.40649+1.68541I$
$u=\ \ 0.058164+0.493664I$ $a=-0.198658+0.573348I$ $b=-1.02847+5.15124I$	$1.76036-2.16253I$	$-22.5713-32.8688I$
$u=\ \ 0.058164-0.493664I$ $a=-0.198658-0.573348I$ $b=-1.02847-5.15124I$	$1.76036+2.16253I$	$-22.5713+32.8688I$

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^{120}+45u^{119}+\cdots-34u^2+1$
c_2, c_6	$u^{120}-u^{119}+\cdots-6u^3+1$
c_3	$u^{120}-49u^{119}+\cdots-10414u+557$
c_4, c_{11}	$u^{120}+3u^{119}+\cdots+2u+1$
c_5	$u^{120}+45u^{119}+\cdots+7856120u+971617$
c_7, c_9	$u^{120}+u^{119}+\cdots+28u+1$
c_8	$u^{120}+5u^{119}+\cdots+12u+1$
c_{10}	$u^{120}+59u^{119}+\cdots+6u^2+1$
c_{12}	$u^{120}+9u^{119}+\cdots-404318u+65969$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^{120}+61y^{119}+\cdots-68y+1$
c_2, c_6	$y^{120}+45y^{119}+\cdots-34y^2+1$
c_3	$y^{120}-603y^{119}+\cdots-24727612y+310249$
c_4, c_{11}	$y^{120}-59y^{119}+\cdots+6y^2+1$
c_5	$y^{120}-639y^{119}+\cdots-56197112480332y+944039594689$
c_7, c_9	$y^{120}-79y^{119}+\cdots+108y+1$
c_8	$y^{120}-3y^{119}+\cdots-60y+1$
c_{10}	$y^{120}+5y^{119}+\cdots+12y+1$
c_{12}	$y^{120}+49y^{119}+\cdots-260893161688y+4351908961$