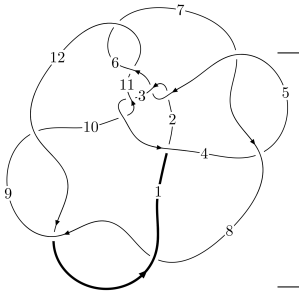
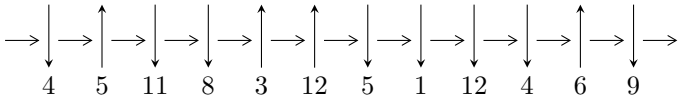
$12n_{0788}$ $(K12n_{0788})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 1.58578 \times 10^{94} u^{73} + 3.02439 \times 10^{94} u^{72} + \cdots + 7.24165 \times 10^{94} b - 1.13790 \times 10^{95},$$
$$6.83460 \times 10^{94} u^{73} + 2.06996 \times 10^{95} u^{72} + \cdots + 7.24165 \times 10^{94} a - 1.20278 \times 10^{96},\ u^{74} + 3u^{73} + \cdots + 21u +$$
$$I_2^u = \langle -u^{18} + 3u^{17} + \cdots + b - 1,\ u^{19} - u^{18} + \cdots + a + 3,\ u^{20} - 2u^{19} + \cdots + 11u^2 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 94 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. $I_1^u =$
$\langle \mathbf{1.59\times10^{94}u^{73}+3.02\times10^{94}u^{72}+\cdots+7.24\times10^{94}b-1.14\times10^{95}},\ \mathbf{6.83\times10^{94}u^{73}+2.07\times10^{95}u^{72}+\cdots+7.24\times10^{94}a-1.20\times10^{96}},\ u^{74}+3u^{73}+\cdots+21u+1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.943790u^{73} - 2.85841u^{72} + \cdots - 200.219u + 16.6092 \\ -0.218980u^{73} - 0.417638u^{72} + \cdots + 27.3920u + 1.57132 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -1.16277u^{73} - 3.27605u^{72} + \cdots - 172.827u + 18.1805 \\ -0.218980u^{73} - 0.417638u^{72} + \cdots + 27.3920u + 1.57132 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -3.74724u^{73} - 11.5498u^{72} + \cdots - 1374.87u - 47.8329 \\ -0.289918u^{73} - 0.893819u^{72} + \cdots - 5.30721u + 1.13701 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.150555u^{73} + 0.0467585u^{72} + \cdots - 582.950u - 39.8482 \\ -0.519493u^{73} - 1.69333u^{72} + \cdots - 12.9835u - 0.00334082 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.09362u^{73} - 3.80737u^{72} + \cdots - 462.305u - 29.4024 \\ -0.0433920u^{73} + 0.106412u^{72} + \cdots - 6.49614u + 0.217922 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.24781u^{73} - 4.44356u^{72} + \cdots - 463.401u - 29.5039 \\ 0.0832740u^{73} + 0.529036u^{72} + \cdots - 3.79157u + 0.290107 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.06428u^{73} + 2.50104u^{72} + \cdots + 542.210u + 39.2751 \\ -0.0130542u^{73} + 0.238478u^{72} + \cdots + 15.1776u + 0.0881159 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.346623u^{73} + 2.28437u^{72} + \cdots + 298.542u + 13.6537$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{74} - 12u^{73} + \cdots + 512u + 73$
c_2, c_5	$u^{74} - 22u^{72} + \cdots + 12106u + 4059$
c_3, c_{10}	$u^{74} - u^{73} + \cdots + 18411u + 6049$
c_4, c_7	$u^{74} - 4u^{73} + \cdots - 2438u + 529$
c_6, c_{11}	$u^{74} - u^{73} + \cdots - 1273u + 2357$
c_8, c_9, c_{12}	$u^{74} - 3u^{73} + \cdots - 21u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{74} + 46y^{72} + \cdots + 277034y + 5329$
c_2, c_5	$y^{74} - 44y^{73} + \cdots - 265207924y + 16475481$
c_3, c_{10}	$y^{74} + 47y^{73} + \cdots + 954117711y + 36590401$
c_4, c_7	$y^{74} + 36y^{73} + \cdots + 5248738y + 279841$
c_6, c_{11}	$y^{74} - 45y^{73} + \cdots - 110160379y + 5555449$
c_8, c_9, c_{12}	$y^{74} + 69y^{73} + \cdots + 273y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.936804+0.339968I$ $a=\ 0.622927+0.688917I$ $b=\ 0.710500-1.130150I$	$2.76516+11.24560I$	0
$u=-0.936804-0.339968I$ $a=\ 0.622927-0.688917I$ $b=\ 0.710500+1.130150I$	$2.76516-11.24560I$	0
$u=\ 0.930090+0.208950I$ $a=-0.334369+0.260725I$ $b=-0.663146-0.942118I$	$-0.61830-4.53833I$	0
$u=\ 0.930090-0.208950I$ $a=-0.334369-0.260725I$ $b=-0.663146+0.942118I$	$-0.61830+4.53833I$	0
$u=-0.319333+1.020450I$ $a=\ 0.23353+1.63070I$ $b=\ 0.553683-0.674115I$	$3.67304-1.08231I$	0
$u=-0.319333-1.020450I$ $a=\ 0.23353-1.63070I$ $b=\ 0.553683+0.674115I$	$3.67304+1.08231I$	0
$u=-0.069737+1.104620I$ $a=\ 0.46995+1.52306I$ $b=\ 0.315493-0.757914I$	$3.55481-1.00960I$	0
$u=-0.069737-1.104620I$ $a=\ 0.46995-1.52306I$ $b=\ 0.315493+0.757914I$	$3.55481+1.00960I$	0
$u=-0.064033+0.874740I$ $a=\ 0.598935+0.016465I$ $b=-0.805267-0.384169I$	$-0.142484-0.979938I$	$-4.00000+2.35513I$
$u=-0.064033-0.874740I$ $a=\ 0.598935-0.016465I$ $b=-0.805267+0.384169I$	$-0.142484+0.979938I$	$-4.00000-2.35513I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.738642+0.887199I$ $a=-0.557382-0.422145I$ $b=\ 0.566445+0.940150I$	$4.40806-5.59603I$	0
$u=-0.738642-0.887199I$ $a=-0.557382+0.422145I$ $b=\ 0.566445-0.940150I$	$4.40806+5.59603I$	0
$u=\ 0.828888+0.091510I$ $a=\ 0.737287-0.641900I$ $b=\ 0.572058+1.134930I$	$-0.10298-4.06471I$	$-0.40205+4.72845I$
$u=\ 0.828888-0.091510I$ $a=\ 0.737287+0.641900I$ $b=\ 0.572058-1.134930I$	$-0.10298+4.06471I$	$-0.40205-4.72845I$
$u=\ 0.789984+0.155180I$ $a=\ 0.697528-0.295007I$ $b=\ 0.608961+0.489624I$	$-2.13816-0.67532I$	$-4.89240-0.69754I$
$u=\ 0.789984-0.155180I$ $a=\ 0.697528+0.295007I$ $b=\ 0.608961-0.489624I$	$-2.13816+0.67532I$	$-4.89240+0.69754I$
$u=\ 0.395613+1.128880I$ $a=-0.468940+0.976139I$ $b=\ 0.587115-0.916327I$	$3.10666-0.34724I$	0
$u=\ 0.395613-1.128880I$ $a=-0.468940-0.976139I$ $b=\ 0.587115+0.916327I$	$3.10666+0.34724I$	0
$u=\ 0.386320+1.141930I$ $a=-0.257479-0.302102I$ $b=\ 0.741571-0.155531I$	$0.88149-3.55827I$	0
$u=\ 0.386320-1.141930I$ $a=-0.257479+0.302102I$ $b=\ 0.741571+0.155531I$	$0.88149+3.55827I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.781957+0.127588I$ $a=\ \ 0.468419-0.340993I$ $b=\ \ 0.969908+0.496154I$	$0.83489+5.14638I$	$-2.92699-4.12698I$
$u=-0.781957-0.127588I$ $a=\ \ 0.468419+0.340993I$ $b=\ \ 0.969908-0.496154I$	$0.83489-5.14638I$	$-2.92699+4.12698I$
$u=-0.690960+0.376818I$ $a=-0.930716-0.945879I$ $b=-0.790965+0.838168I$	$-1.32937+4.37262I$	$-1.68695-7.55471I$
$u=-0.690960-0.376818I$ $a=-0.930716+0.945879I$ $b=-0.790965-0.838168I$	$-1.32937-4.37262I$	$-1.68695+7.55471I$
$u=\ \ 0.208976+1.238970I$ $a=\ \ 0.725780-0.430028I$ $b=-1.33074+0.55805I$	$2.07909-2.04945I$	0
$u=\ \ 0.208976-1.238970I$ $a=\ \ 0.725780+0.430028I$ $b=-1.33074-0.55805I$	$2.07909+2.04945I$	0
$u=-0.239083+1.235520I$ $a=-0.56305-1.99635I$ $b=-0.653467+1.183850I$	$2.21691+4.57437I$	0
$u=-0.239083-1.235520I$ $a=-0.56305+1.99635I$ $b=-0.653467-1.183850I$	$2.21691-4.57437I$	0
$u=-0.098165+1.270860I$ $a=\ \ 0.22331+3.15689I$ $b=-0.02511-1.52128I$	$11.61620-0.14821I$	0
$u=-0.098165-1.270860I$ $a=\ \ 0.22331-3.15689I$ $b=-0.02511+1.52128I$	$11.61620+0.14821I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.290096+1.244670I$ $a=-1.42838-0.42517I$ $b=-0.079374+0.951986I$	$9.54324+4.38718I$	0
$u=-0.290096-1.244670I$ $a=-1.42838+0.42517I$ $b=-0.079374-0.951986I$	$9.54324-4.38718I$	0
$u=0.664261+1.105320I$ $a=0.578989-0.326355I$ $b=-0.309901+0.732892I$	$1.98668-0.96963I$	0
$u=0.664261-1.105320I$ $a=0.578989+0.326355I$ $b=-0.309901-0.732892I$	$1.98668+0.96963I$	0
$u=-0.703470+0.069064I$ $a=0.078771-1.020400I$ $b=0.318672-0.907573I$	$5.93010-0.78432I$	$1.48301-0.85749I$
$u=-0.703470-0.069064I$ $a=0.078771+1.020400I$ $b=0.318672+0.907573I$	$5.93010+0.78432I$	$1.48301+0.85749I$
$u=0.000271+1.298230I$ $a=-1.73564+1.88420I$ $b=-0.120936-0.853354I$	$9.15293+3.49758I$	0
$u=0.000271-1.298230I$ $a=-1.73564-1.88420I$ $b=-0.120936+0.853354I$	$9.15293-3.49758I$	0
$u=-0.654738+0.139993I$ $a=-0.365809-0.113721I$ $b=-0.749123-0.884451I$	$-1.17142-1.41028I$	$-0.82219-1.94292I$
$u=-0.654738-0.139993I$ $a=-0.365809+0.113721I$ $b=-0.749123+0.884451I$	$-1.17142+1.41028I$	$-0.82219+1.94292I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.021534+1.337130I$ $a=\ 0.554741-0.978134I$ $b=\ 0.795121+0.856242I$	$9.72603-3.20768I$	0
$u=-0.021534-1.337130I$ $a=\ 0.554741+0.978134I$ $b=\ 0.795121-0.856242I$	$9.72603+3.20768I$	0
$u=-0.104300+1.333230I$ $a=-0.26774-2.22250I$ $b=\ 0.24396+1.72146I$	$12.48010+3.12382I$	0
$u=-0.104300-1.333230I$ $a=-0.26774+2.22250I$ $b=\ 0.24396-1.72146I$	$12.48010-3.12382I$	0
$u=-0.276951+1.318390I$ $a=\ 0.405659+0.960983I$ $b=\ 0.727988-1.027740I$	$10.30720+2.74116I$	0
$u=-0.276951-1.318390I$ $a=\ 0.405659-0.960983I$ $b=\ 0.727988+1.027740I$	$10.30720-2.74116I$	0
$u=\ 0.616600+0.149646I$ $a=-0.576417+1.181130I$ $b=-0.763533-0.734900I$	$-1.25932-0.85009I$	$-2.93324-0.64796I$
$u=\ 0.616600-0.149646I$ $a=-0.576417-1.181130I$ $b=-0.763533+0.734900I$	$-1.25932+0.85009I$	$-2.93324+0.64796I$
$u=\ 0.359175+1.322210I$ $a=\ 0.82697-2.18712I$ $b=\ 0.498014+1.278840I$	$4.31927-8.33215I$	0
$u=\ 0.359175-1.322210I$ $a=\ 0.82697+2.18712I$ $b=\ 0.498014-1.278840I$	$4.31927+8.33215I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.331105+1.339680I$ $a=-0.749942+0.054369I$ $b=\ \ 1.238930+0.313660I$	$5.44209+9.16208I$	0
$u=-0.331105-1.339680I$ $a=-0.749942-0.054369I$ $b=\ \ 1.238930-0.313660I$	$5.44209-9.16208I$	0
$u=-0.305381+1.368770I$ $a=\ \ 0.761541+0.467536I$ $b=-0.853662-0.650481I$	$3.67876+2.15533I$	0
$u=-0.305381-1.368770I$ $a=\ \ 0.761541-0.467536I$ $b=-0.853662+0.650481I$	$3.67876-2.15533I$	0
$u=\ \ 0.275962+1.383250I$ $a=-0.15950+2.10027I$ $b=-0.462021-1.121230I$	$3.68775-4.15450I$	0
$u=\ \ 0.275962-1.383250I$ $a=-0.15950-2.10027I$ $b=-0.462021+1.121230I$	$3.68775+4.15450I$	0
$u=\ \ 0.34603+1.39240I$ $a=\ \ 0.49266-1.38993I$ $b=\ \ 0.540130+0.835161I$	$2.80424-4.78161I$	0
$u=\ \ 0.34603-1.39240I$ $a=\ \ 0.49266+1.38993I$ $b=\ \ 0.540130-0.835161I$	$2.80424+4.78161I$	0
$u=\ \ 0.39339+1.39442I$ $a=-0.31063+1.63356I$ $b=-0.77536-1.22079I$	$4.43148-9.25628I$	0
$u=\ \ 0.39339-1.39442I$ $a=-0.31063-1.63356I$ $b=-0.77536+1.22079I$	$4.43148+9.25628I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.27655+1.49326I$ $a=-0.28891-1.91776I$ $b=-0.713564+1.014530I$	$4.77334+7.96569I$	0
$u=-0.27655-1.49326I$ $a=-0.28891+1.91776I$ $b=-0.713564-1.014530I$	$4.77334-7.96569I$	0
$u=-0.38358+1.47124I$ $a=\ 0.47036+1.92708I$ $b=\ 0.72193-1.29934I$	$8.5275+16.0127I$	0
$u=-0.38358-1.47124I$ $a=\ 0.47036-1.92708I$ $b=\ 0.72193+1.29934I$	$8.5275-16.0127I$	0
$u=\ 0.049778+0.404950I$ $a=\ 1.039240+0.230406I$ $b=-0.504136-0.382867I$	$-0.230831-1.075800I$	$-3.86726+5.56314I$
$u=\ 0.049778-0.404950I$ $a=\ 1.039240-0.230406I$ $b=-0.504136+0.382867I$	$-0.230831+1.075800I$	$-3.86726-5.56314I$
$u=-0.00897+1.65353I$ $a=-0.17869+1.83789I$ $b=\ 0.212633-0.762848I$	$12.84880-0.51128I$	0
$u=-0.00897-1.65353I$ $a=-0.17869-1.83789I$ $b=\ 0.212633+0.762848I$	$12.84880+0.51128I$	0
$u=-0.318578+0.088858I$ $a=\ 1.46832-0.71391I$ $b=\ 0.12577+1.49843I$	$7.89983+1.60233I$	$-5.43520-6.25438I$
$u=-0.318578-0.088858I$ $a=\ 1.46832+0.71391I$ $b=\ 0.12577-1.49843I$	$7.89983-1.60233I$	$-5.43520+6.25438I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.10261+1.70630I$ $a=-0.280005-1.271740I$ $b=\ \ 0.219435+0.960300I$	$13.66950-2.42291I$	0
$u=-0.10261-1.70630I$ $a=-0.280005+1.271740I$ $b=\ \ 0.219435-0.960300I$	$13.66950+2.42291I$	0
$u=-0.0287687+0.0617431I$ $a=\ \ 26.4987-3.7687I$ $b=\ \ 0.331976+0.710871I$	$5.14104-3.45109I$	$1.82404+12.33527I$
$u=-0.0287687-0.0617431I$ $a=\ \ 26.4987+3.7687I$ $b=\ \ 0.331976-0.710871I$	$5.14104+3.45109I$	$1.82404-12.33527I$

II.

$\boldsymbol{I_2^u = \langle -u^{18}+3u^{17}+\cdots+b-1,\ u^{19}-u^{18}+\cdots+a+3,\ u^{20}-2u^{19}+\cdots+11u^2+1\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^{19}+u^{18}+\cdots+u-3 \\ u^{18}-3u^{17}+\cdots-5u+1 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -u^{19}+2u^{18}+\cdots-4u-2 \\ u^{18}-3u^{17}+\cdots-5u+1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2u^{19}-4u^{18}+\cdots-2u+2 \\ -u^{19}+2u^{18}+\cdots+2u+1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 3u^{19}-6u^{18}+\cdots-8u+5 \\ -u^{19}+2u^{18}+\cdots+7u+1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2u^{18}+2u^{17}+\cdots-11u-1 \\ -u^{19}+3u^{18}+\cdots+10u^2+3 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} u^2+1 \\ u^4+2u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^{19}-10u^{17}+\cdots-10u-1 \\ u^{18}-u^{17}+\cdots+2u+3 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^{19}-4u^{18}+\cdots+14u-2 \\ -u^{19}+3u^{18}+\cdots+u-2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$= -u^{19}+6u^{18}-19u^{17}+70u^{16}-134u^{15}+339u^{14}-478u^{13}+875u^{12}-956u^{11}+$
$1285u^{10}-1103u^9+1064u^8-736u^7+473u^6-303u^5+123u^4-88u^3+36u^2-8u+12$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20}+3u^{19}+\cdots+9u+1$
c_2	$u^{20}+5u^{19}+\cdots+5u+1$
c_3	$u^{20}+9u^{18}+\cdots+2u^2+1$
c_4	$u^{20}-3u^{19}+\cdots-3u+1$
c_5	$u^{20}-5u^{19}+\cdots-5u+1$
c_6	$u^{20}-7u^{18}+\cdots+u^2+1$
c_7	$u^{20}+3u^{19}+\cdots+3u+1$
c_8, c_9	$u^{20}-2u^{19}+\cdots+11u^2+1$
c_{10}	$u^{20}+9u^{18}+\cdots+2u^2+1$
c_{11}	$u^{20}-7u^{18}+\cdots+u^2+1$
c_{12}	$u^{20}+2u^{19}+\cdots+11u^2+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{20} + 3y^{19} + \cdots + 3y + 1$
c_2, c_5	$y^{20} - 17y^{19} + \cdots - 7y + 1$
c_3, c_{10}	$y^{20} + 18y^{19} + \cdots + 4y + 1$
c_4, c_7	$y^{20} + 15y^{19} + \cdots + 11y + 1$
c_6, c_{11}	$y^{20} - 14y^{19} + \cdots + 2y + 1$
c_8, c_9, c_{12}	$y^{20} + 24y^{19} + \cdots + 22y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.237849 + 1.138180I$ $a = 0.595231 - 0.531708I$ $b = -0.924433 + 0.400435I$	$1.41358 - 1.18127I$	$-1.009011 + 0.133987I$
$u = 0.237849 - 1.138180I$ $a = 0.595231 + 0.531708I$ $b = -0.924433 - 0.400435I$	$1.41358 + 1.18127I$	$-1.009011 - 0.133987I$
$u = 0.458379 + 1.075510I$ $a = 0.583352 - 0.508557I$ $b = -0.447997 + 0.445190I$	$1.38393 - 1.37957I$	$-2.62288 + 2.95794I$
$u = 0.458379 - 1.075510I$ $a = 0.583352 + 0.508557I$ $b = -0.447997 - 0.445190I$	$1.38393 + 1.37957I$	$-2.62288 - 2.95794I$
$u = -0.032562 + 1.259960I$ $a = 0.46714 - 2.85286I$ $b = 0.19047 + 1.50771I$	$11.54060 + 1.70476I$	$5.35646 - 2.70130I$
$u = -0.032562 - 1.259960I$ $a = 0.46714 + 2.85286I$ $b = 0.19047 - 1.50771I$	$11.54060 - 1.70476I$	$5.35646 + 2.70130I$
$u = -0.178451 + 1.257340I$ $a = 1.210450 + 0.323547I$ $b = 0.463393 - 0.711840I$	$8.17331 + 4.87622I$	$1.33927 - 6.40565I$
$u = -0.178451 - 1.257340I$ $a = 1.210450 - 0.323547I$ $b = 0.463393 + 0.711840I$	$8.17331 - 4.87622I$	$1.33927 + 6.40565I$
$u = 0.707607 + 0.137682I$ $a = -0.717254 + 0.452751I$ $b = -0.655863 - 0.894386I$	$-1.58933 - 2.51677I$	$-3.68440 + 4.44805I$
$u = 0.707607 - 0.137682I$ $a = -0.717254 - 0.452751I$ $b = -0.655863 + 0.894386I$	$-1.58933 + 2.51677I$	$-3.68440 - 4.44805I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.30740 + 1.39766I$ $a = -0.46774 + 1.89500I$ $b = -0.575858 - 1.113880I$	$3.36407 - 6.18880I$	$2.22658 + 5.47050I$
$u = 0.30740 - 1.39766I$ $a = -0.46774 - 1.89500I$ $b = -0.575858 + 1.113880I$	$3.36407 + 6.18880I$	$2.22658 - 5.47050I$
$u = -0.341446 + 0.403300I$ $a = -3.11005 + 0.22725I$ $b = 0.254427 + 0.644394I$	$5.20886 - 2.95060I$	$4.15959 - 2.66248I$
$u = -0.341446 - 0.403300I$ $a = -3.11005 - 0.22725I$ $b = 0.254427 - 0.644394I$	$5.20886 + 2.95060I$	$4.15959 + 2.66248I$
$u = -0.02478 + 1.56705I$ $a = -0.30939 + 1.77476I$ $b = 0.040337 - 1.275460I$	$15.1260 - 0.9723I$	$8.34609 + 0.42020I$
$u = -0.02478 - 1.56705I$ $a = -0.30939 - 1.77476I$ $b = 0.040337 + 1.275460I$	$15.1260 + 0.9723I$	$8.34609 - 0.42020I$
$u = -0.06629 + 1.64547I$ $a = -0.51898 - 1.60081I$ $b = 0.050399 + 0.710453I$	$12.82460 - 1.35935I$	$4.17653 + 4.55797I$
$u = -0.06629 - 1.64547I$ $a = -0.51898 + 1.60081I$ $b = 0.050399 - 0.710453I$	$12.82460 + 1.35935I$	$4.17653 - 4.55797I$
$u = -0.067709 + 0.319554I$ $a = -2.23275 + 0.53767I$ $b = 0.105123 - 1.386410I$	$8.35169 - 1.33697I$	$8.71177 - 1.53767I$
$u = -0.067709 - 0.319554I$ $a = -2.23275 - 0.53767I$ $b = 0.105123 + 1.386410I$	$8.35169 + 1.33697I$	$8.71177 + 1.53767I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20}+3u^{19}+\cdots+9u+1)(u^{74}-12u^{73}+\cdots+512u+73)$
c_2	$(u^{20}+5u^{19}+\cdots+5u+1)(u^{74}-22u^{72}+\cdots+12106u+4059)$
c_3	$(u^{20}+9u^{18}+\cdots+2u^2+1)(u^{74}-u^{73}+\cdots+18411u+6049)$
c_4	$(u^{20}-3u^{19}+\cdots-3u+1)(u^{74}-4u^{73}+\cdots-2438u+529)$
c_5	$(u^{20}-5u^{19}+\cdots-5u+1)(u^{74}-22u^{72}+\cdots+12106u+4059)$
c_6	$(u^{20}-7u^{18}+\cdots+u^2+1)(u^{74}-u^{73}+\cdots-1273u+2357)$
c_7	$(u^{20}+3u^{19}+\cdots+3u+1)(u^{74}-4u^{73}+\cdots-2438u+529)$
c_8, c_9	$(u^{20}-2u^{19}+\cdots+11u^2+1)(u^{74}-3u^{73}+\cdots-21u+1)$
c_{10}	$(u^{20}+9u^{18}+\cdots+2u^2+1)(u^{74}-u^{73}+\cdots+18411u+6049)$
c_{11}	$(u^{20}-7u^{18}+\cdots+u^2+1)(u^{74}-u^{73}+\cdots-1273u+2357)$
c_{12}	$(u^{20}+2u^{19}+\cdots+11u^2+1)(u^{74}-3u^{73}+\cdots-21u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{20}+3y^{19}+\cdots+3y+1)(y^{74}+46y^{72}+\cdots+277034y+5329)$
c_2, c_5	$(y^{20}-17y^{19}+\cdots-7y+1)$ $\cdot(y^{74}-44y^{73}+\cdots-265207924y+16475481)$
c_3, c_{10}	$(y^{20}+18y^{19}+\cdots+4y+1)$ $\cdot(y^{74}+47y^{73}+\cdots+954117711y+36590401)$
c_4, c_7	$(y^{20}+15y^{19}+\cdots+11y+1)$ $\cdot(y^{74}+36y^{73}+\cdots+5248738y+279841)$
c_6, c_{11}	$(y^{20}-14y^{19}+\cdots+2y+1)$ $\cdot(y^{74}-45y^{73}+\cdots-110160379y+5555449)$
c_8, c_9, c_{12}	$(y^{20}+24y^{19}+\cdots+22y+1)(y^{74}+69y^{73}+\cdots+273y+1)$