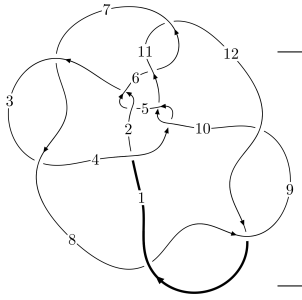
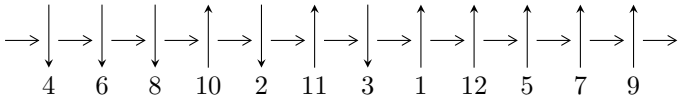
$12a_{0899}$ $(K12a_{0899})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 5.31448 \times 10^{257} u^{111} - 1.76917 \times 10^{257} u^{110} + \cdots + 1.48293 \times 10^{257} b - 1.37884 \times 10^{258}, \\ & 7.71958 \times 10^{259} u^{111} - 1.40702 \times 10^{260} u^{110} + \cdots + 1.48293 \times 10^{257} a - 4.42439 \times 10^{260}, \\ & u^{112} - 2u^{111} + \cdots - 23u + 1 \rangle \\ I_2^u = \langle & 15997 u^{25} + 41142 u^{24} + \cdots + 6461 b - 29882,\ 15550 u^{25} + 46684 u^{24} + \cdots + 6461 a - 54931, \\ & u^{26} + 3u^{25} + \cdots - 8u - 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 138 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. $\boldsymbol{I_1^u = \langle 5.31 \times 10^{257} u^{111} - 1.77 \times 10^{257} u^{110} + \cdots + 1.48 \times 10^{257} b - 1.38 \times 10^{258},\ 7.72 \times 10^{259} u^{111} - 1.41 \times 10^{260} u^{110} + \cdots + 1.48 \times 10^{257} a - 4.42 \times 10^{260},\ u^{112} - 2u^{111} + \cdots - 23u + 1 \rangle}$

(i) Arc colorings

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -520.564u^{111} + 948.813u^{110} + \cdots - 51467.1u + 2983.55 \\ -3.58378u^{111} + 1.19303u^{110} + \cdots - 267.555u + 9.29811 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -542.410u^{111} + 984.657u^{110} + \cdots - 53337.3u + 3085.16 \\ -2.16416u^{111} - 7.83445u^{110} + \cdots - 108.879u + 1.44931 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -1056.91u^{111} + 1933.81u^{110} + \cdots - 106888.u + 6250.33 \\ -75.7120u^{111} + 135.568u^{110} + \cdots - 8302.06u + 488.749 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1068.16u^{111} + 1953.81u^{110} + \cdots - 107946.u + 6311.12 \\ -77.0039u^{111} + 137.226u^{110} + \cdots - 8412.35u + 495.607 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -509.806u^{111} + 926.133u^{110} + \cdots - 50189.2u + 2902.75 \\ -2.58895u^{111} - 5.71626u^{110} + \cdots - 190.952u + 5.54308 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -239.300u^{111} + 439.445u^{110} + \cdots - 24450.5u + 1427.38 \\ 38.7353u^{111} - 70.8328u^{110} + \cdots + 4055.77u - 242.400 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -665.637u^{111} + 1220.07u^{110} + \cdots - 67560.3u + 3951.81 \\ 9.83848u^{111} - 18.3554u^{110} + \cdots + 1269.98u - 78.0166 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -109.837u^{111} + 198.495u^{110} + \cdots - 11119.0u + 666.424$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{112} - 4u^{111} + \cdots - 7935981u + 3893033$
c_2, c_5	$u^{112} + u^{111} + \cdots - 5u - 1$
c_3, c_7	$u^{112} - u^{111} + \cdots - 101643u + 105943$
c_4, c_{10}	$u^{112} - u^{111} + \cdots + 21029u + 4019$
c_6, c_{11}	$u^{112} + u^{111} + \cdots - 2376u - 363$
c_8, c_9, c_{12}	$u^{112} + 2u^{111} + \cdots + 23u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{112} - 44y^{111} + \cdots - 268247760995493y + 15155705939089$
c_2, c_5	$y^{112} - 61y^{111} + \cdots - 91y + 1$
c_3, c_7	$y^{112} - 65y^{111} + \cdots - 130189064955y + 11223919249$
c_4, c_{10}	$y^{112} - 45y^{111} + \cdots - 949754237y + 16152361$
c_6, c_{11}	$y^{112} - 63y^{111} + \cdots - 4022040y + 131769$
c_8, c_9, c_{12}	$y^{112} + 110y^{111} + \cdots - 77y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.888878 + 0.483069I$ $a = 0.820267 - 0.852850I$ $b = 0.105956 + 0.406692I$	$-0.75358 + 13.54180I$	0
$u = 0.888878 - 0.483069I$ $a = 0.820267 + 0.852850I$ $b = 0.105956 - 0.406692I$	$-0.75358 - 13.54180I$	0
$u = -0.848540 + 0.407010I$ $a = -0.977309 - 0.231448I$ $b = 0.164712 + 0.307819I$	$-3.28167 + 2.36912I$	0
$u = -0.848540 - 0.407010I$ $a = -0.977309 + 0.231448I$ $b = 0.164712 - 0.307819I$	$-3.28167 - 2.36912I$	0
$u = 0.984950 + 0.412034I$ $a = -0.768371 + 0.619947I$ $b = 0.000420 - 0.259804I$	$2.27707 + 6.24115I$	0
$u = 0.984950 - 0.412034I$ $a = -0.768371 - 0.619947I$ $b = 0.000420 + 0.259804I$	$2.27707 - 6.24115I$	0
$u = -0.656780 + 0.638719I$ $a = -0.213899 - 0.194560I$ $b = 0.359123 + 0.934305I$	$-4.15110 - 7.34468I$	0
$u = -0.656780 - 0.638719I$ $a = -0.213899 + 0.194560I$ $b = 0.359123 - 0.934305I$	$-4.15110 + 7.34468I$	0
$u = 0.309096 + 0.859738I$ $a = -0.683678 - 0.177668I$ $b = 0.698397 - 0.169884I$	$2.04420 - 4.39389I$	0
$u = 0.309096 - 0.859738I$ $a = -0.683678 + 0.177668I$ $b = 0.698397 + 0.169884I$	$2.04420 + 4.39389I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.908274$ $a = 1.24784$ $b = -0.295395$	-6.60691	0
$u = -0.892339 + 0.659239I$ $a = 0.360633 + 0.565138I$ $b = 0.005139 - 0.182725I$	$0.29491 - 2.84712I$	0
$u = -0.892339 - 0.659239I$ $a = 0.360633 - 0.565138I$ $b = 0.005139 + 0.182725I$	$0.29491 + 2.84712I$	0
$u = 0.812198 + 0.764487I$ $a = -0.010822 + 0.256620I$ $b = -0.774675 + 0.603921I$	$-1.53240 - 7.81325I$	0
$u = 0.812198 - 0.764487I$ $a = -0.010822 - 0.256620I$ $b = -0.774675 - 0.603921I$	$-1.53240 + 7.81325I$	0
$u = -0.721219 + 0.471928I$ $a = -0.83967 - 1.36144I$ $b = -0.076016 + 0.296520I$	$-3.81198 - 6.62535I$	0
$u = -0.721219 - 0.471928I$ $a = -0.83967 + 1.36144I$ $b = -0.076016 - 0.296520I$	$-3.81198 + 6.62535I$	0
$u = -0.692596 + 0.511227I$ $a = 0.127886 + 0.177907I$ $b = 0.963684 + 0.451851I$	$-3.97617 + 1.98114I$	0
$u = -0.692596 - 0.511227I$ $a = 0.127886 - 0.177907I$ $b = 0.963684 - 0.451851I$	$-3.97617 - 1.98114I$	0
$u = -0.827898 + 0.802767I$ $a = -0.226581 - 0.011489I$ $b = -0.474973 - 0.448407I$	$-0.07268 - 3.27898I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.827898-0.802767I$ $a=-0.226581+0.011489I$ $b=-0.474973+0.448407I$	$-0.07268+3.27898I$	0
$u=-0.571035+0.609680I$ $a=-0.286966+0.923789I$ $b=-0.081621-0.325077I$	$-0.36569-3.63805I$	0
$u=-0.571035-0.609680I$ $a=-0.286966-0.923789I$ $b=-0.081621+0.325077I$	$-0.36569+3.63805I$	0
$u=0.415284+1.093070I$ $a=0.188349+0.475086I$ $b=-0.654100+0.506853I$	$4.02686+1.81633I$	0
$u=0.415284-1.093070I$ $a=0.188349-0.475086I$ $b=-0.654100-0.506853I$	$4.02686-1.81633I$	0
$u=-0.469786+0.633364I$ $a=-0.809509+0.707431I$ $b=-0.246105-0.235061I$	$-0.31782-3.60247I$	0
$u=-0.469786-0.633364I$ $a=-0.809509-0.707431I$ $b=-0.246105+0.235061I$	$-0.31782+3.60247I$	0
$u=-0.522680+0.554135I$ $a=0.073104+0.998642I$ $b=0.468593-0.304847I$	$0.73324-3.77410I$	0
$u=-0.522680-0.554135I$ $a=0.073104-0.998642I$ $b=0.468593+0.304847I$	$0.73324+3.77410I$	0
$u=0.584674+0.478117I$ $a=0.526437-0.727056I$ $b=-0.518271+0.594563I$	$-7.45052+1.97887I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.584674 - 0.478117I$ $a = 0.526437 + 0.727056I$ $b = -0.518271 - 0.594563I$	$-7.45052 - 1.97887I$	0
$u = 0.239762 + 1.222110I$ $a = 0.903455 - 0.644187I$ $b = 2.08979 - 1.24020I$	$-1.78376 + 4.58038I$	0
$u = 0.239762 - 1.222110I$ $a = 0.903455 + 0.644187I$ $b = 2.08979 + 1.24020I$	$-1.78376 - 4.58038I$	0
$u = 0.719928 + 0.204245I$ $a = 1.073130 - 0.817359I$ $b = 0.544051 + 0.338917I$	$6.62237 + 2.30625I$	0
$u = 0.719928 - 0.204245I$ $a = 1.073130 + 0.817359I$ $b = 0.544051 - 0.338917I$	$6.62237 - 2.30625I$	0
$u = 0.734331 + 1.018270I$ $a = 0.220294 - 0.220908I$ $b = 0.683557 - 0.753562I$	$0.526244 - 0.211571I$	0
$u = 0.734331 - 1.018270I$ $a = 0.220294 + 0.220908I$ $b = 0.683557 + 0.753562I$	$0.526244 + 0.211571I$	0
$u = 0.229525 + 1.250300I$ $a = -0.71424 + 1.43502I$ $b = -1.68809 + 2.63776I$	$0.56515 + 3.26255I$	0
$u = 0.229525 - 1.250300I$ $a = -0.71424 - 1.43502I$ $b = -1.68809 - 2.63776I$	$0.56515 - 3.26255I$	0
$u = 0.640231 + 0.286062I$ $a = -0.870616 + 1.039980I$ $b = -0.642136 - 0.634118I$	$3.72195 + 7.95714I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.640231 - 0.286062I$ $a = -0.870616 - 1.039980I$ $b = -0.642136 + 0.634118I$	$3.72195 - 7.95714I$	0
$u = 0.065592 + 1.324340I$ $a = 1.38872 + 1.34246I$ $b = 1.94468 + 2.24119I$	$-2.68484 - 4.51466I$	0
$u = 0.065592 - 1.324340I$ $a = 1.38872 - 1.34246I$ $b = 1.94468 - 2.24119I$	$-2.68484 + 4.51466I$	0
$u = -0.569998 + 0.354459I$ $a = 0.068889 - 0.831964I$ $b = -0.564605 + 0.099910I$	$1.270540 + 0.011557I$	0
$u = -0.569998 - 0.354459I$ $a = 0.068889 + 0.831964I$ $b = -0.564605 - 0.099910I$	$1.270540 - 0.011557I$	0
$u = 0.667378$ $a = 2.88391$ $b = 0.210916$	4.38393	0
$u = 0.187133 + 1.339810I$ $a = 0.02910 - 1.82847I$ $b = -0.07474 - 3.15921I$	$-2.58031 + 1.43395I$	0
$u = 0.187133 - 1.339810I$ $a = 0.02910 + 1.82847I$ $b = -0.07474 + 3.15921I$	$-2.58031 - 1.43395I$	0
$u = 0.038211 + 1.362560I$ $a = -1.03902 - 1.59308I$ $b = -0.91425 - 2.61426I$	$-0.909859 - 0.175020I$	0
$u = 0.038211 - 1.362560I$ $a = -1.03902 + 1.59308I$ $b = -0.91425 + 2.61426I$	$-0.909859 + 0.175020I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.621091 + 0.052178I$ $a = -2.07214 + 1.27013I$ $b = -0.110111 - 0.184233I$	$1.78705 - 1.40064I$	0
$u = 0.621091 - 0.052178I$ $a = -2.07214 - 1.27013I$ $b = -0.110111 + 0.184233I$	$1.78705 + 1.40064I$	0
$u = 0.046611 + 1.388430I$ $a = -0.764451 + 0.232753I$ $b = -2.78588 + 0.38709I$	$-2.91103 + 6.41883I$	0
$u = 0.046611 - 1.388430I$ $a = -0.764451 - 0.232753I$ $b = -2.78588 - 0.38709I$	$-2.91103 - 6.41883I$	0
$u = 0.041592 + 1.388610I$ $a = -0.049359 - 0.808927I$ $b = 1.31465 - 1.45004I$	$-1.11162 + 1.61071I$	0
$u = 0.041592 - 1.388610I$ $a = -0.049359 + 0.808927I$ $b = 1.31465 + 1.45004I$	$-1.11162 - 1.61071I$	0
$u = -0.216039 + 1.373150I$ $a = -0.597574 + 0.473238I$ $b = -0.891372 + 0.629845I$	$-4.09294 - 2.79139I$	0
$u = -0.216039 - 1.373150I$ $a = -0.597574 - 0.473238I$ $b = -0.891372 - 0.629845I$	$-4.09294 + 2.79139I$	0
$u = 0.241355 + 1.389350I$ $a = 0.36435 + 1.63142I$ $b = 0.49327 + 2.39937I$	$1.53420 + 5.71848I$	0
$u = 0.241355 - 1.389350I$ $a = 0.36435 - 1.63142I$ $b = 0.49327 - 2.39937I$	$1.53420 - 5.71848I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.108951+1.406800I$ $a=-0.333720+1.288790I$ $b=-0.40544+1.85399I$	$-4.05644-2.25978I$	0
$u=-0.108951-1.406800I$ $a=-0.333720-1.288790I$ $b=-0.40544-1.85399I$	$-4.05644+2.25978I$	0
$u=0.034930+1.413010I$ $a=1.62996-1.06504I$ $b=1.06109-1.25473I$	$-5.63807-0.19831I$	0
$u=0.034930-1.413010I$ $a=1.62996+1.06504I$ $b=1.06109+1.25473I$	$-5.63807+0.19831I$	0
$u=-0.556673+0.170203I$ $a=-0.038788-0.318279I$ $b=-0.424577+0.144248I$	$1.029400-0.157780I$	$9.96548+0.I$
$u=-0.556673-0.170203I$ $a=-0.038788+0.318279I$ $b=-0.424577-0.144248I$	$1.029400+0.157780I$	$9.96548+0.I$
$u=-0.01611+1.42034I$ $a=-1.27207+4.12698I$ $b=-1.23266+4.32374I$	$-4.86355+0.25606I$	0
$u=-0.01611-1.42034I$ $a=-1.27207-4.12698I$ $b=-1.23266-4.32374I$	$-4.86355-0.25606I$	0
$u=0.21434+1.42402I$ $a=-0.54873-1.93154I$ $b=-0.90888-2.65849I$	$-1.78470+11.01610I$	0
$u=0.21434-1.42402I$ $a=-0.54873+1.93154I$ $b=-0.90888+2.65849I$	$-1.78470-11.01610I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.03911+1.44804I$ $a=\ \ 0.18081-1.61496I$ $b=-0.20881-2.50376I$	$-7.08685+0.13972I$	0
$u=-0.03911-1.44804I$ $a=\ \ 0.18081+1.61496I$ $b=-0.20881+2.50376I$	$-7.08685-0.13972I$	0
$u=\ \ 0.40142+1.40893I$ $a=-0.441279+1.042440I$ $b=-0.46892+2.11084I$	$-11.17970+4.75221I$	0
$u=\ \ 0.40142-1.40893I$ $a=-0.441279-1.042440I$ $b=-0.46892-2.11084I$	$-11.17970-4.75221I$	0
$u=-0.12792+1.48402I$ $a=\ \ 0.77290-1.49329I$ $b=\ \ 1.18588-2.33514I$	$-5.94706-5.93213I$	0
$u=-0.12792-1.48402I$ $a=\ \ 0.77290+1.49329I$ $b=\ \ 1.18588+2.33514I$	$-5.94706+5.93213I$	0
$u=\ \ 0.18456+1.49371I$ $a=-0.51205+1.47476I$ $b=-0.14404+2.54769I$	$-13.8995+4.7412I$	0
$u=\ \ 0.18456-1.49371I$ $a=-0.51205-1.47476I$ $b=-0.14404-2.54769I$	$-13.8995-4.7412I$	0
$u=-0.26311+1.50158I$ $a=-0.23567+1.80532I$ $b=-0.61845+3.22042I$	$-10.2116-10.2371I$	0
$u=-0.26311-1.50158I$ $a=-0.23567-1.80532I$ $b=-0.61845-3.22042I$	$-10.2116+10.2371I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.10480 + 1.53037I$ $a = 0.266993 - 1.138530I$ $b = -0.27946 - 1.92995I$	$-8.14520 + 1.33211I$	0
$u = 0.10480 - 1.53037I$ $a = 0.266993 + 1.138530I$ $b = -0.27946 + 1.92995I$	$-8.14520 - 1.33211I$	0
$u = -0.065095 + 0.460437I$ $a = 1.58814 + 1.28274I$ $b = 0.479028 - 0.182021I$	$-1.165640 + 0.499413I$	$-5.19076 + 1.66062I$
$u = -0.065095 - 0.460437I$ $a = 1.58814 - 1.28274I$ $b = 0.479028 + 0.182021I$	$-1.165640 - 0.499413I$	$-5.19076 - 1.66062I$
$u = -0.23916 + 1.53025I$ $a = 0.659000 + 0.430745I$ $b = 0.286824 + 0.951997I$	$-10.65820 - 1.50319I$	0
$u = -0.23916 - 1.53025I$ $a = 0.659000 - 0.430745I$ $b = 0.286824 - 0.951997I$	$-10.65820 + 1.50319I$	0
$u = -0.22584 + 1.53488I$ $a = 0.350088 - 1.331390I$ $b = 0.99650 - 2.34919I$	$-7.35856 - 6.71737I$	0
$u = -0.22584 - 1.53488I$ $a = 0.350088 + 1.331390I$ $b = 0.99650 + 2.34919I$	$-7.35856 + 6.71737I$	0
$u = -0.20916 + 1.54648I$ $a = 0.51492 + 1.48797I$ $b = 0.10664 + 2.34240I$	$-11.3166 - 10.5015I$	0
$u = -0.20916 - 1.54648I$ $a = 0.51492 - 1.48797I$ $b = 0.10664 - 2.34240I$	$-11.3166 + 10.5015I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.21303+1.54923I$ $a=-0.048088-0.987232I$ $b=\ 0.54693-1.72484I$	$-7.68044-6.50345I$	0
$u=-0.21303-1.54923I$ $a=-0.048088+0.987232I$ $b=\ 0.54693+1.72484I$	$-7.68044+6.50345I$	0
$u=\ 0.32187+1.53085I$ $a=\ 0.15654+1.65884I$ $b=\ 0.56396+2.85036I$	$-7.2754+17.9474I$	0
$u=\ 0.32187-1.53085I$ $a=\ 0.15654-1.65884I$ $b=\ 0.56396-2.85036I$	$-7.2754-17.9474I$	0
$u=\ 0.35599+1.52655I$ $a=-0.081116-1.371590I$ $b=-0.41070-2.44033I$	$-4.00844+11.06760I$	0
$u=\ 0.35599-1.52655I$ $a=-0.081116+1.371590I$ $b=-0.41070+2.44033I$	$-4.00844-11.06760I$	0
$u=-0.32751+1.53359I$ $a=\ 0.263870+1.264230I$ $b=\ 0.24911+2.19387I$	$-9.58615-2.01979I$	0
$u=-0.32751-1.53359I$ $a=\ 0.263870-1.264230I$ $b=\ 0.24911-2.19387I$	$-9.58615+2.01979I$	0
$u=-0.24795+1.56918I$ $a=\ 0.248137-1.325260I$ $b=\ 0.69224-2.24165I$	$-7.09786-6.80459I$	0
$u=-0.24795-1.56918I$ $a=\ 0.248137+1.325260I$ $b=\ 0.69224+2.24165I$	$-7.09786+6.80459I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.283745+0.256798I$ $a=-0.504962+0.072472I$ $b=-0.98472+1.03807I$	$0.425848+0.918121I$	$5.6447+13.0644I$
$u=-0.283745-0.256798I$ $a=-0.504962-0.072472I$ $b=-0.98472-1.03807I$	$0.425848-0.918121I$	$5.6447-13.0644I$
$u=\ 0.13783+1.62171I$ $a=-0.478196+0.748250I$ $b=-0.136955+1.302590I$	$-9.93942-4.42272I$	0
$u=\ 0.13783-1.62171I$ $a=-0.478196-0.748250I$ $b=-0.136955-1.302590I$	$-9.93942+4.42272I$	0
$u=\ 0.081238+0.362325I$ $a=\ 0.93810+1.59958I$ $b=\ 0.474193-0.284562I$	$-1.207760+0.458570I$	$-5.75903-0.46248I$
$u=\ 0.081238-0.362325I$ $a=\ 0.93810-1.59958I$ $b=\ 0.474193+0.284562I$	$-1.207760-0.458570I$	$-5.75903+0.46248I$
$u=\ 0.117177+0.197063I$ $a=\ 1.36184+0.83111I$ $b=\ 0.98382-1.29410I$	$-0.385914-0.804745I$	$-5.0743-22.6531I$
$u=\ 0.117177-0.197063I$ $a=\ 1.36184-0.83111I$ $b=\ 0.98382+1.29410I$	$-0.385914+0.804745I$	$-5.0743+22.6531I$
$u=\ 0.203253+0.026875I$ $a=\ 1.99481-8.68595I$ $b=\ 0.939429+0.097452I$	$1.73008-5.65394I$	$8.80031+7.77715I$
$u=\ 0.203253-0.026875I$ $a=\ 1.99481+8.68595I$ $b=\ 0.939429-0.097452I$	$1.73008+5.65394I$	$8.80031-7.77715I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.166581 + 0.003687I$		
$a = -6.71770 - 5.02112I$	$3.59989 + 0.92371I$	$5.69455 - 0.96799I$
$b = -1.138890 + 0.141353I$		
$u = \quad 0.166581 - 0.003687I$		
$a = -6.71770 + 5.02112I$	$3.59989 - 0.92371I$	$5.69455 + 0.96799I$
$b = -1.138890 - 0.141353I$		

II. $I_2^u = \langle 15997u^{25} + 41142u^{24} + \cdots + 6461b - 29882,\ 15550u^{25} + 46684u^{24} + \cdots + 6461a - 54931,\ u^{26} + 3u^{25} + \cdots - 8u - 1 \rangle$

(i) Arc colorings

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2.40675u^{25} - 7.22551u^{24} + \cdots + 36.9885u + 8.50193 \\ -2.47593u^{25} - 6.36774u^{24} + \cdots + 19.6601u + 4.62498 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -4.33633u^{25} - 11.6199u^{24} + \cdots + 54.1998u + 13.1217 \\ -2.88438u^{25} - 6.48042u^{24} + \cdots + 10.4348u + 3.23061 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -1.98901u^{25} - 6.63736u^{24} + \cdots + 12.8352u + 2.96703 \\ -1.95929u^{25} - 7.51586u^{24} + \cdots + 22.0232u + 3.79338 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -4.07398u^{25} - 12.1879u^{24} + \cdots + 36.2506u + 8.86983 \\ -2.52314u^{25} - 8.78471u^{24} + \cdots + 19.0020u + 3.68209 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -4.19502u^{25} - 11.9848u^{24} + \cdots + 65.9534u + 14.5146 \\ -2.53645u^{25} - 6.26621u^{24} + \cdots + 20.5115u + 4.94738 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.436155u^{25} - 1.73116u^{24} + \cdots + 1.02120u + 2.11128 \\ -1.06176u^{25} - 2.36186u^{24} + \cdots + 15.9686u + 4.57963 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.76567u^{25} + 5.80235u^{24} + \cdots - 37.0766u - 4.81814 \\ -1.35738u^{25} - 2.49760u^{24} + \cdots + 6.19161u + 2.49466 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{37907}{6461}u^{25} + \frac{116252}{6461}u^{24} + \cdots + \frac{46555}{6461}u + \frac{41161}{6461}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{26} - 9u^{25} + \cdots + 20u - 1$
c_2	$u^{26} + 6u^{25} + \cdots + 6u + 1$
c_3	$u^{26} + u^{24} + \cdots - 4u + 1$
c_4	$u^{26} + u^{24} + \cdots - 2u + 1$
c_5	$u^{26} - 6u^{25} + \cdots - 6u + 1$
c_6	$u^{26} + 2u^{25} + \cdots + u + 1$
c_7	$u^{26} + u^{24} + \cdots + 4u + 1$
c_8, c_9	$u^{26} + 3u^{25} + \cdots - 8u - 1$
c_{10}	$u^{26} + u^{24} + \cdots + 2u + 1$
c_{11}	$u^{26} - 2u^{25} + \cdots - u + 1$
c_{12}	$u^{26} - 3u^{25} + \cdots + 8u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{26} - y^{25} + \cdots - 28y + 1$
c_2, c_5	$y^{26} - 14y^{25} + \cdots - 14y + 1$
c_3, c_7	$y^{26} + 2y^{25} + \cdots - 2y + 1$
c_4, c_{10}	$y^{26} + 2y^{25} + \cdots - 4y + 1$
c_6, c_{11}	$y^{26} - 20y^{25} + \cdots - 23y + 1$
c_8, c_9, c_{12}	$y^{26} + 25y^{25} + \cdots - 16y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.431137 + 0.906221I$ $a = 0.525034 - 0.591227I$ $b = 1.091530 - 0.895741I$	$2.53235 + 2.66750I$	$2.71797 - 4.12988I$
$u = 0.431137 - 0.906221I$ $a = 0.525034 + 0.591227I$ $b = 1.091530 + 0.895741I$	$2.53235 - 2.66750I$	$2.71797 + 4.12988I$
$u = -0.625821 + 0.774116I$ $a = -0.390768 + 0.069603I$ $b = -0.857456 - 0.155023I$	$0.47651 - 1.59156I$	$3.09179 + 1.37031I$
$u = -0.625821 - 0.774116I$ $a = -0.390768 - 0.069603I$ $b = -0.857456 + 0.155023I$	$0.47651 + 1.59156I$	$3.09179 - 1.37031I$
$u = 0.350912 + 0.982744I$ $a = 0.724535 + 0.882894I$ $b = 0.008338 + 0.328720I$	$2.43763 + 0.44354I$	$2.62000 - 0.55350I$
$u = 0.350912 - 0.982744I$ $a = 0.724535 - 0.882894I$ $b = 0.008338 - 0.328720I$	$2.43763 - 0.44354I$	$2.62000 + 0.55350I$
$u = -0.831316 + 0.756902I$ $a = 0.029481 + 0.555177I$ $b = -0.008560 - 0.211277I$	$0.42794 - 3.89764I$	$7.7924 + 12.0278I$
$u = -0.831316 - 0.756902I$ $a = 0.029481 - 0.555177I$ $b = -0.008560 + 0.211277I$	$0.42794 + 3.89764I$	$7.7924 - 12.0278I$
$u = -0.849486$ $a = -1.21471$ $b = 0.371246$	-6.96773	-11.6510
$u = 0.070449 + 1.211910I$ $a = -1.36431 + 0.84655I$ $b = -3.06517 + 1.22645I$	$-1.15999 + 6.13130I$	$1.88516 - 7.10392I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.070449 - 1.211910I$ $a = -1.36431 - 0.84655I$ $b = -3.06517 - 1.22645I$	$-1.15999 - 6.13130I$	$1.88516 + 7.10392I$
$u = \quad 0.198476 + 1.288260I$ $a = \quad 0.69883 - 1.53351I$ $b = \quad 1.74962 - 2.80678I$	$1.04031 + 2.89888I$	$6.59624 + 1.23523I$
$u = \quad 0.198476 - 1.288260I$ $a = \quad 0.69883 + 1.53351I$ $b = \quad 1.74962 + 2.80678I$	$1.04031 - 2.89888I$	$6.59624 - 1.23523I$
$u = -0.189235 + 1.318580I$ $a = -0.0005167 - 0.0414970I$ $b = -0.079356 - 0.419932I$	$-4.53291 - 3.09962I$	$-7.39566 + 5.41041I$
$u = -0.189235 - 1.318580I$ $a = -0.0005167 + 0.0414970I$ $b = -0.079356 + 0.419932I$	$-4.53291 + 3.09962I$	$-7.39566 - 5.41041I$
$u = \quad 0.062411 + 0.616662I$ $a = -2.28838 - 0.79006I$ $b = \quad 0.168163 - 0.402814I$	$1.04818 - 5.52113I$	$-2.64456 + 5.76748I$
$u = \quad 0.062411 - 0.616662I$ $a = -2.28838 + 0.79006I$ $b = \quad 0.168163 + 0.402814I$	$1.04818 + 5.52113I$	$-2.64456 - 5.76748I$
$u = \quad 0.615645$ $a = -3.00112$ $b = -0.255912$	4.97554	13.3710
$u = -0.022819 + 1.411910I$ $a = -0.31168 - 3.49706I$ $b = -0.29189 - 3.84914I$	$-4.95148 + 0.31707I$	$-23.6637 + 3.8963I$
$u = -0.022819 - 1.411910I$ $a = -0.31168 + 3.49706I$ $b = -0.29189 + 3.84914I$	$-4.95148 - 0.31707I$	$-23.6637 - 3.8963I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.35018+1.43296I$ $a=\ \ 0.431703+1.069810I$ $b=\ \ 0.34799+2.11293I$	$-11.70470-4.38629I$	$-7.27702+0.I$
$u=-0.35018-1.43296I$ $a=\ \ 0.431703-1.069810I$ $b=\ \ 0.34799-2.11293I$	$-11.70470+4.38629I$	$-7.27702+0.I$
$u=-0.20834+1.58437I$ $a=\ \ 0.456806-1.211770I$ $b=\ \ 1.13875-2.06521I$	$-7.51272-7.42768I$	$-5.3367+13.3175I$
$u=-0.20834-1.58437I$ $a=\ \ 0.456806+1.211770I$ $b=\ \ 1.13875+2.06521I$	$-7.51272+7.42768I$	$-5.3367-13.3175I$
$u=-0.268753+0.037149I$ $a=\ \ 1.59717+0.91988I$ $b=-0.259630+0.919058I$	$-0.134077-1.006200I$	$5.75427-0.30798I$
$u=-0.268753-0.037149I$ $a=\ \ 1.59717-0.91988I$ $b=-0.259630-0.919058I$	$-0.134077+1.006200I$	$5.75427+0.30798I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{26}-9u^{25}+\cdots+20u-1)$ $\cdot(u^{112}-4u^{111}+\cdots-7935981u+3893033)$
c_2	$(u^{26}+6u^{25}+\cdots+6u+1)(u^{112}+u^{111}+\cdots-5u-1)$
c_3	$(u^{26}+u^{24}+\cdots-4u+1)(u^{112}-u^{111}+\cdots-101643u+105943)$
c_4	$(u^{26}+u^{24}+\cdots-2u+1)(u^{112}-u^{111}+\cdots+21029u+4019)$
c_5	$(u^{26}-6u^{25}+\cdots-6u+1)(u^{112}+u^{111}+\cdots-5u-1)$
c_6	$(u^{26}+2u^{25}+\cdots+u+1)(u^{112}+u^{111}+\cdots-2376u-363)$
c_7	$(u^{26}+u^{24}+\cdots+4u+1)(u^{112}-u^{111}+\cdots-101643u+105943)$
c_8, c_9	$(u^{26}+3u^{25}+\cdots-8u-1)(u^{112}+2u^{111}+\cdots+23u+1)$
c_{10}	$(u^{26}+u^{24}+\cdots+2u+1)(u^{112}-u^{111}+\cdots+21029u+4019)$
c_{11}	$(u^{26}-2u^{25}+\cdots-u+1)(u^{112}+u^{111}+\cdots-2376u-363)$
c_{12}	$(u^{26}-3u^{25}+\cdots+8u-1)(u^{112}+2u^{111}+\cdots+23u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{26} - y^{25} + \cdots - 28y + 1)$ $\cdot (y^{112} - 44y^{111} + \cdots - 268247760995493y + 15155705939089)$
c_2, c_5	$(y^{26} - 14y^{25} + \cdots - 14y + 1)(y^{112} - 61y^{111} + \cdots - 91y + 1)$
c_3, c_7	$(y^{26} + 2y^{25} + \cdots - 2y + 1)$ $\cdot (y^{112} - 65y^{111} + \cdots - 130189064955y + 11223919249)$
c_4, c_{10}	$(y^{26} + 2y^{25} + \cdots - 4y + 1)$ $\cdot (y^{112} - 45y^{111} + \cdots - 949754237y + 16152361)$
c_6, c_{11}	$(y^{26} - 20y^{25} + \cdots - 23y + 1)$ $\cdot (y^{112} - 63y^{111} + \cdots - 4022040y + 131769)$
c_8, c_9, c_{12}	$(y^{26} + 25y^{25} + \cdots - 16y + 1)(y^{112} + 110y^{111} + \cdots - 77y + 1)$