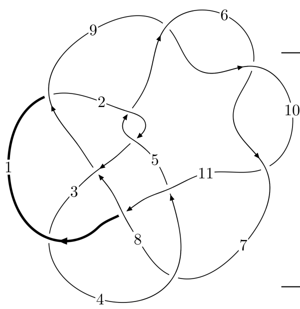
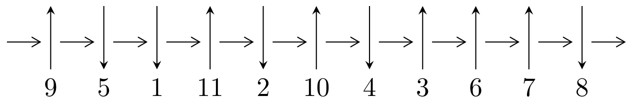
$11a_{282}$ $(K11a_{282})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 2.13823 \times 10^{329} u^{79} - 1.64855 \times 10^{330} u^{78} + \cdots + 9.41459 \times 10^{329} b + 1.13698 \times 10^{331}, \\ & -1.24104 \times 10^{330} u^{79} + 9.42225 \times 10^{330} u^{78} + \cdots + 1.88292 \times 10^{330} a - 8.31994 \times 10^{330}, \\ & u^{80} - 8u^{79} + \cdots + 232u - 16 \rangle \\ I_2^u = \langle & 3937680u^{12} + 7222127u^{11} + \cdots + 336922213b + 110970935, \\ & -33661342u^{12} - 112072005u^{11} + \cdots + 707536473a - 1914131674, \\ & u^{13} + 3u^{12} + u^{11} - 5u^{10} - 10u^9 - 11u^8 + 21u^6 + 22u^5 - 5u^4 - 6u^3 + 32u^2 + 49u + 21 \rangle \end{aligned}$$

$$I_1^v = \langle a,\ -6v^3 + 4v^2 + 5b - 33v + 13,\ v^4 - v^3 + 6v^2 - 4v + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 97 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. $\boldsymbol{I_1^u = \langle 2.14 \times 10^{329} u^{79} - 1.65 \times 10^{330} u^{78} + \cdots + 9.41 \times 10^{329} b + 1.14 \times 10^{331},\ -1.24 \times 10^{330} u^{79} + 9.42 \times 10^{330} u^{78} + \cdots + 1.88 \times 10^{330} a - 8.32 \times 10^{330},\ u^{80} - 8u^{79} + \cdots + 232u - 16\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.659106u^{79} - 5.00407u^{78} + \cdots - 122.616u + 4.41864 \\ -0.227119u^{79} + 1.75106u^{78} + \cdots + 151.411u - 12.0768 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0.472695u^{79} - 3.57754u^{78} + \cdots - 23.0170u - 3.35768 \\ -0.204660u^{79} + 1.57688u^{78} + \cdots + 139.369u - 11.0407 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.191836u^{79} - 1.57834u^{78} + \cdots - 74.5281u + 7.17744 \\ 0.252449u^{79} - 1.90962u^{78} + \cdots - 23.3077u + 1.27382 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.431988u^{79} - 3.25301u^{78} + \cdots + 28.7946u - 7.65818 \\ -0.227119u^{79} + 1.75106u^{78} + \cdots + 151.411u - 12.0768 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.108601u^{79} + 0.694864u^{78} + \cdots - 42.0396u + 5.25398 \\ 0.251916u^{79} - 1.93686u^{78} + \cdots - 58.9949u + 4.13119 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -0.0246729u^{79} + 0.192222u^{78} + \cdots + 0.535696u - 3.21204 \\ -0.255007u^{79} + 1.91467u^{78} + \cdots + 51.6752u - 3.40150 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.223539u^{79} - 1.88491u^{78} + \cdots - 80.6924u + 6.78770 \\ 0.436133u^{79} - 3.33065u^{78} + \cdots - 70.4389u + 4.43414 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.0921991u^{79} + 0.895913u^{78} + \cdots + 43.4256u - 3.45099 \\ -0.411264u^{79} + 3.14443u^{78} + \cdots + 63.0579u - 3.81043 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.0921991u^{79} + 0.895913u^{78} + \cdots + 43.4256u - 3.45099 \\ -0.411264u^{79} + 3.14443u^{78} + \cdots + 63.0579u - 3.81043 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.662366u^{79} + 5.15267u^{78} + \cdots + 112.853u - 7.98177$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{80} - u^{79} + \cdots + 166862u + 35227$
c_2, c_5	$u^{80} + 3u^{79} + \cdots + 537u + 55$
c_3	$u^{80} - 8u^{79} + \cdots + 232u - 16$
c_4	$u^{80} - 3u^{79} + \cdots - 1033u - 173$
c_6, c_9, c_{10}	$u^{80} - 3u^{79} + \cdots + 34u + 1$
c_7	$u^{80} + 3u^{79} + \cdots + 357u - 319$
c_8	$u^{80} + 3u^{78} + \cdots + 26u + 1$
c_{11}	$u^{80} - 2u^{79} + \cdots + 28u + 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{80} - 37y^{79} + \cdots - 40557549062y + 1240941529$
c_2, c_5	$y^{80} + 55y^{79} + \cdots - 597359y + 3025$
c_3	$y^{80} + 8y^{79} + \cdots + 1728y + 256$
c_4	$y^{80} - 23y^{79} + \cdots - 1094423y + 29929$
c_6, c_9, c_{10}	$y^{80} - 91y^{79} + \cdots - 880y + 1$
c_7	$y^{80} + 19y^{79} + \cdots + 3233535y + 101761$
c_8	$y^{80} + 6y^{79} + \cdots - 284y + 1$
c_{11}	$y^{80} - 12y^{79} + \cdots - 614y + 25$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.840683 + 0.530658I$ $a = 1.35694 + 0.42194I$ $b = -0.649032 - 1.118120I$	$4.67943 - 5.53958I$	0
$u = 0.840683 - 0.530658I$ $a = 1.35694 - 0.42194I$ $b = -0.649032 + 1.118120I$	$4.67943 + 5.53958I$	0
$u = 0.180021 + 0.949720I$ $a = -0.367561 + 0.226099I$ $b = 0.495810 - 1.018400I$	$2.87404 - 1.12286I$	0
$u = 0.180021 - 0.949720I$ $a = -0.367561 - 0.226099I$ $b = 0.495810 + 1.018400I$	$2.87404 + 1.12286I$	0
$u = -0.104754 + 0.947386I$ $a = -1.019370 + 0.771877I$ $b = -0.275736 + 0.979574I$	$8.07177 + 3.14572I$	0
$u = -0.104754 - 0.947386I$ $a = -1.019370 - 0.771877I$ $b = -0.275736 - 0.979574I$	$8.07177 - 3.14572I$	0
$u = 0.661970 + 0.670152I$ $a = 0.630442 - 0.139375I$ $b = -1.31406 + 0.69854I$	$2.00824 - 5.11347I$	0
$u = 0.661970 - 0.670152I$ $a = 0.630442 + 0.139375I$ $b = -1.31406 - 0.69854I$	$2.00824 + 5.11347I$	0
$u = -0.892356 + 0.677258I$ $a = 1.379940 - 0.203911I$ $b = -0.493046 + 0.873919I$	$0.18057 + 4.85137I$	0
$u = -0.892356 - 0.677258I$ $a = 1.379940 + 0.203911I$ $b = -0.493046 - 0.873919I$	$0.18057 - 4.85137I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.985954 + 0.565348I$ $a = -0.680804 + 0.032647I$ $b = 1.90069 - 0.40869I$	$8.36747 - 7.88982I$	0
$u = 0.985954 - 0.565348I$ $a = -0.680804 - 0.032647I$ $b = 1.90069 + 0.40869I$	$8.36747 + 7.88982I$	0
$u = -0.123573 + 0.830325I$ $a = -1.204170 - 0.462968I$ $b = 0.94407 - 1.46088I$	$12.6911 + 7.3736I$	$10.17010 - 5.87052I$
$u = -0.123573 - 0.830325I$ $a = -1.204170 + 0.462968I$ $b = 0.94407 + 1.46088I$	$12.6911 - 7.3736I$	$10.17010 + 5.87052I$
$u = -1.099290 + 0.392496I$ $a = -0.452143 - 0.129794I$ $b = 1.013660 + 0.291391I$	$-2.29379 + 0.10630I$	0
$u = -1.099290 - 0.392496I$ $a = -0.452143 + 0.129794I$ $b = 1.013660 - 0.291391I$	$-2.29379 - 0.10630I$	0
$u = 0.306099 + 0.749139I$ $a = 1.17339 + 1.71227I$ $b = 0.307186 + 0.932817I$	$12.2687 - 8.2177I$	$9.86670 + 6.29220I$
$u = 0.306099 - 0.749139I$ $a = 1.17339 - 1.71227I$ $b = 0.307186 - 0.932817I$	$12.2687 + 8.2177I$	$9.86670 - 6.29220I$
$u = -0.694646 + 0.970578I$ $a = 0.528065 + 0.382905I$ $b = -0.464932 + 0.052795I$	$-1.04673 + 2.15724I$	0
$u = -0.694646 - 0.970578I$ $a = 0.528065 - 0.382905I$ $b = -0.464932 - 0.052795I$	$-1.04673 - 2.15724I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.24309$ $a=\ \ 0.562759$ $b=-2.26176$	2.97554	0
$u=-0.237050+0.708818I$ $a=-1.70391-1.51624I$ $b=\ \ 0.096962-0.807799I$	$2.27021+2.30399I$	$10.35821-6.17851I$
$u=-0.237050-0.708818I$ $a=-1.70391+1.51624I$ $b=\ \ 0.096962+0.807799I$	$2.27021-2.30399I$	$10.35821+6.17851I$
$u=\ \ 0.542023+1.130380I$ $a=-1.275280+0.501763I$ $b=\ \ 0.686902+0.769875I$	$2.03522-6.05720I$	0
$u=\ \ 0.542023-1.130380I$ $a=-1.275280-0.501763I$ $b=\ \ 0.686902-0.769875I$	$2.03522+6.05720I$	0
$u=\ \ 0.600098+0.443545I$ $a=-1.68558-0.03962I$ $b=\ \ 0.580481+0.881463I$	$-0.19438-2.30796I$	$-0.22105+1.92438I$
$u=\ \ 0.600098-0.443545I$ $a=-1.68558+0.03962I$ $b=\ \ 0.580481-0.881463I$	$-0.19438+2.30796I$	$-0.22105-1.92438I$
$u=-1.25520$ $a=-0.463800$ $b=\ \ 1.40127$	-2.39628	0
$u=\ \ 0.031843+0.737888I$ $a=\ \ 1.61286+0.51963I$ $b=-0.793415+0.882844I$	$4.86209+2.93048I$	$10.03952-4.02142I$
$u=\ \ 0.031843-0.737888I$ $a=\ \ 1.61286-0.51963I$ $b=-0.793415-0.882844I$	$4.86209-2.93048I$	$10.03952+4.02142I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.134268 + 0.711933I$ $a = -1.92090 - 1.34681I$ $b = 0.091092 - 0.685075I$	$4.72557 - 3.64290I$	$11.77697 + 3.87111I$
$u = 0.134268 - 0.711933I$ $a = -1.92090 + 1.34681I$ $b = 0.091092 + 0.685075I$	$4.72557 + 3.64290I$	$11.77697 - 3.87111I$
$u = -0.773109 + 1.021590I$ $a = 1.037650 + 0.280309I$ $b = -0.636257 + 0.699388I$	$-0.70494 + 3.55934I$	0
$u = -0.773109 - 1.021590I$ $a = 1.037650 - 0.280309I$ $b = -0.636257 - 0.699388I$	$-0.70494 - 3.55934I$	0
$u = 0.503388 + 0.507249I$ $a = 1.49012 - 1.24386I$ $b = -0.436495 - 0.728628I$	$2.29106 + 1.38243I$	$5.34088 + 2.43199I$
$u = 0.503388 - 0.507249I$ $a = 1.49012 + 1.24386I$ $b = -0.436495 + 0.728628I$	$2.29106 - 1.38243I$	$5.34088 - 2.43199I$
$u = -0.618698 + 0.202823I$ $a = -1.75964 + 0.57403I$ $b = 0.882942 + 0.636078I$	$5.11206 + 0.66852I$	$4.43405 - 0.97778I$
$u = -0.618698 - 0.202823I$ $a = -1.75964 - 0.57403I$ $b = 0.882942 - 0.636078I$	$5.11206 - 0.66852I$	$4.43405 + 0.97778I$
$u = 0.037653 + 1.353780I$ $a = 0.50667 - 1.33040I$ $b = -0.007936 - 0.628942I$	$9.22965 + 1.15849I$	0
$u = 0.037653 - 1.353780I$ $a = 0.50667 + 1.33040I$ $b = -0.007936 + 0.628942I$	$9.22965 - 1.15849I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.606329 + 0.168371I$ $a = 0.448090 + 0.339379I$ $b = -0.90226 - 1.37943I$	$1.23578 - 1.64636I$	$-4.64141 + 0.02219I$
$u = -0.606329 - 0.168371I$ $a = 0.448090 - 0.339379I$ $b = -0.90226 + 1.37943I$	$1.23578 + 1.64636I$	$-4.64141 - 0.02219I$
$u = 0.391328 + 1.322250I$ $a = 0.119458 + 0.817321I$ $b = 0.388099 + 1.137900I$	$11.34390 + 2.19538I$	0
$u = 0.391328 - 1.322250I$ $a = 0.119458 - 0.817321I$ $b = 0.388099 - 1.137900I$	$11.34390 - 2.19538I$	0
$u = -1.27792 + 0.61735I$ $a = -0.960577 + 0.453365I$ $b = 0.688710 - 1.026030I$	$6.33830 + 6.39761I$	0
$u = -1.27792 - 0.61735I$ $a = -0.960577 - 0.453365I$ $b = 0.688710 + 1.026030I$	$6.33830 - 6.39761I$	0
$u = 0.032952 + 0.576655I$ $a = 1.46468 - 0.71797I$ $b = -0.101802 - 0.683648I$	$1.19697 + 0.93213I$	$5.66000 - 4.34612I$
$u = 0.032952 - 0.576655I$ $a = 1.46468 + 0.71797I$ $b = -0.101802 + 0.683648I$	$1.19697 - 0.93213I$	$5.66000 + 4.34612I$
$u = 0.95738 + 1.05845I$ $a = 0.724741 + 0.037351I$ $b = -0.848862 - 0.953885I$	$4.89732 - 3.26135I$	0
$u = 0.95738 - 1.05845I$ $a = 0.724741 - 0.037351I$ $b = -0.848862 + 0.953885I$	$4.89732 + 3.26135I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.31711 + 0.58795I$ $a = 0.317199 - 0.365878I$ $b = -0.650343 + 0.545302I$	$1.32833 + 5.02960I$	0
$u = 1.31711 - 0.58795I$ $a = 0.317199 + 0.365878I$ $b = -0.650343 - 0.545302I$	$1.32833 - 5.02960I$	0
$u = -0.91120 + 1.16270I$ $a = -0.915353 - 0.231344I$ $b = 0.867163 - 1.107560I$	$-0.36262 + 7.36216I$	0
$u = -0.91120 - 1.16270I$ $a = -0.915353 + 0.231344I$ $b = 0.867163 + 1.107560I$	$-0.36262 - 7.36216I$	0
$u = 0.84233 + 1.21734I$ $a = 1.048000 - 0.255925I$ $b = -0.861274 - 1.103910I$	$3.36104 - 12.42420I$	0
$u = 0.84233 - 1.21734I$ $a = 1.048000 + 0.255925I$ $b = -0.861274 + 1.103910I$	$3.36104 + 12.42420I$	0
$u = 0.090035 + 0.437599I$ $a = 1.30433 - 1.91862I$ $b = -0.33747 - 1.70963I$	$5.32179 - 3.40594I$	$2.62572 + 4.19099I$
$u = 0.090035 - 0.437599I$ $a = 1.30433 + 1.91862I$ $b = -0.33747 + 1.70963I$	$5.32179 + 3.40594I$	$2.62572 - 4.19099I$
$u = 0.97937 + 1.22317I$ $a = -0.701705 + 0.073709I$ $b = 1.12921 + 1.37276I$	$12.19820 - 2.98748I$	0
$u = 0.97937 - 1.22317I$ $a = -0.701705 - 0.073709I$ $b = 1.12921 - 1.37276I$	$12.19820 + 2.98748I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.10845 + 1.13168I$ $a = -0.556064 - 0.215884I$ $b = 0.231975 + 0.619801I$	$4.41415 - 4.62933I$	0
$u = 1.10845 - 1.13168I$ $a = -0.556064 + 0.215884I$ $b = 0.231975 - 0.619801I$	$4.41415 + 4.62933I$	0
$u = -0.62097 + 1.48212I$ $a = -0.603775 - 0.282250I$ $b = -0.083111 - 0.634277I$	$6.44646 + 1.55360I$	0
$u = -0.62097 - 1.48212I$ $a = -0.603775 + 0.282250I$ $b = -0.083111 + 0.634277I$	$6.44646 - 1.55360I$	0
$u = -0.22286 + 1.62378I$ $a = 0.179632 - 0.083745I$ $b = 0.047288 + 0.965549I$	$10.69120 + 0.96957I$	0
$u = -0.22286 - 1.62378I$ $a = 0.179632 + 0.083745I$ $b = 0.047288 - 0.965549I$	$10.69120 - 0.96957I$	0
$u = 0.358983$ $a = 2.21477$ $b = -0.931576$	1.95889	7.65550
$u = 0.194090 + 0.272092I$ $a = -0.20112 + 2.73214I$ $b = 0.150945 - 0.683093I$	$-0.19507 + 1.98978I$	$-2.02649 - 3.13292I$
$u = 0.194090 - 0.272092I$ $a = -0.20112 - 2.73214I$ $b = 0.150945 + 0.683093I$	$-0.19507 - 1.98978I$	$-2.02649 + 3.13292I$
$u = -0.99878 + 1.34734I$ $a = 0.801356 + 0.223250I$ $b = -0.95541 + 1.44182I$	$6.72098 + 9.95443I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.99878 - 1.34734I$ $a = 0.801356 - 0.223250I$ $b = -0.95541 - 1.44182I$	$6.72098 - 9.95443I$	0
$u = 1.01708 + 1.33898I$ $a = -0.912261 + 0.182240I$ $b = 0.90323 + 1.34714I$	$11.3034 - 16.6494I$	0
$u = 1.01708 - 1.33898I$ $a = -0.912261 - 0.182240I$ $b = 0.90323 - 1.34714I$	$11.3034 + 16.6494I$	0
$u = 0.301070 + 0.097438I$ $a = -2.96038 - 0.47685I$ $b = 0.388094 + 0.934223I$	$-0.23009 - 2.03396I$	$-1.94973 + 4.80886I$
$u = 0.301070 - 0.097438I$ $a = -2.96038 + 0.47685I$ $b = 0.388094 - 0.934223I$	$-0.23009 + 2.03396I$	$-1.94973 - 4.80886I$
$u = 1.32759 + 1.28115I$ $a = 0.435680 + 0.292556I$ $b = 0.216379 - 0.662813I$	$11.14960 - 5.91154I$	0
$u = 1.32759 - 1.28115I$ $a = 0.435680 - 0.292556I$ $b = 0.216379 + 0.662813I$	$11.14960 + 5.91154I$	0
$u = 2.04806 + 0.66379I$ $a = -0.202686 + 0.177029I$ $b = 0.815165 - 0.599211I$	$9.02729 + 7.18461I$	0
$u = 2.04806 - 0.66379I$ $a = -0.202686 - 0.177029I$ $b = 0.815165 + 0.599211I$	$9.02729 - 7.18461I$	0
$u = -2.35929$ $a = 0.234357$ $b = -1.23717$	3.63331	0

II.

$\boldsymbol{I^u_2 = \langle 3.94 \times 10^6 u^{12} + 7.22 \times 10^6 u^{11} + \cdots + 3.37 \times 10^7 b + 1.11 \times 10^8,\ -3.37 \times 10^7 u^{12} - 1.12 \times 10^8 u^{11} + \cdots + 7.08 \times 10^8 a - 1.91 \times 10^9,\ u^{13} + 3u^{12} + \cdots + 49u + 21\rangle}$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0475754u^{12} + 0.158397u^{11} + \cdots + 2.63182u + 2.70535 \\ -0.116872u^{12} - 0.214356u^{11} + \cdots - 3.15940u - 3.29367 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.0939626u^{12} - 0.177550u^{11} + \cdots - 2.29456u - 0.917416 \\ -0.0984380u^{12} - 0.132288u^{11} + \cdots - 1.78704u - 1.43167 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.0974548u^{12} - 0.134968u^{11} + \cdots - 2.14972u - 0.168948 \\ 0.131921u^{12} + 0.252476u^{11} + \cdots + 4.12715u + 1.92149 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0692967u^{12} - 0.0559585u^{11} + \cdots - 0.527582u - 0.588320 \\ -0.116872u^{12} - 0.214356u^{11} + \cdots - 3.15940u - 3.29367 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.0150781u^{12} + 0.149314u^{11} + \cdots + 2.70377u + 1.59189 \\ 0.152024u^{12} + 0.245102u^{11} + \cdots + 4.10179u + 1.80867 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.374581u^{12} + 0.853567u^{11} + \cdots + 12.5909u + 8.34154 \\ -0.000258220u^{12} - 0.163285u^{11} + \cdots - 2.83369u - 3.28985 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0491972u^{12} - 0.0739141u^{11} + \cdots - 0.447523u - 1.40184 \\ -0.205857u^{12} - 0.543635u^{11} + \cdots - 6.96965u - 6.24448 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.308684u^{12} + 0.714823u^{11} + \cdots + 9.62392u + 6.65131 \\ 0.0104863u^{12} - 0.0908456u^{11} + \cdots - 1.82459u - 1.81409 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.308684u^{12} + 0.714823u^{11} + \cdots + 9.62392u + 6.65131 \\ 0.0104863u^{12} - 0.0908456u^{11} + \cdots - 1.82459u - 1.81409 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{68717915}{33692213}u^{12} - \frac{144911480}{33692213}u^{11} + \cdots - \frac{2024942532}{33692213}u - \frac{1491879585}{33692213}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{13}+2u^{12}+\cdots-5u+1$
c_2	$u^{13}-4u^{12}+\cdots+u-1$
c_3	$u^{13}+3u^{12}+\cdots+49u+21$
c_4	$u^{13}+2u^{12}+\cdots+u-1$
c_5	$u^{13}+4u^{12}+\cdots+u+1$
c_6	$u^{13}-2u^{12}+\cdots-2u-1$
c_7	$u^{13}-u^{12}-2u^{11}+2u^{10}-2u^8-u^7+4u^6+3u^5-3u^3+u^2+1$
c_8	$u^{13}+u^{11}-3u^{10}+3u^8+4u^7-u^6-2u^5+2u^3-2u^2-u+1$
c_9, c_{10}	$u^{13}+2u^{12}+\cdots-2u+1$
c_{11}	$u^{13}-3u^{12}+\cdots-3u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{13} + 4y^{12} + \cdots + 29y - 1$
c_2, c_5	$y^{13} + 6y^{12} + \cdots - 11y - 1$
c_3	$y^{13} - 7y^{12} + \cdots + 1057y - 441$
c_4	$y^{13} - 12y^{12} + \cdots + 13y - 1$
c_6, c_9, c_{10}	$y^{13} - 18y^{12} + \cdots + 12y - 1$
c_7	$y^{13} - 5y^{12} + \cdots - 2y - 1$
c_8	$y^{13} + 2y^{12} + \cdots + 5y - 1$
c_{11}	$y^{13} - 3y^{12} + \cdots + 5y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.768609 + 0.743048I$ $a = 0.838700 + 0.429088I$ $b = -0.682142 - 0.364870I$	$3.33972 - 4.33224I$	$4.51841 + 6.25661I$
$u = 0.768609 - 0.743048I$ $a = 0.838700 - 0.429088I$ $b = -0.682142 + 0.364870I$	$3.33972 + 4.33224I$	$4.51841 - 6.25661I$
$u = -0.715463 + 0.860111I$ $a = -1.375700 - 0.204288I$ $b = 0.466212 - 0.815541I$	$0.19353 + 4.01825I$	$5.07811 - 3.58457I$
$u = -0.715463 - 0.860111I$ $a = -1.375700 + 0.204288I$ $b = 0.466212 + 0.815541I$	$0.19353 - 4.01825I$	$5.07811 + 3.58457I$
$u = -0.870665$ $a = 0.951912$ $b = -1.42390$	1.14758	-4.24720
$u = -0.968338 + 0.637475I$ $a = 1.292330 - 0.362604I$ $b = -0.628375 + 1.103970I$	$4.22742 + 6.07962I$	$0.91502 - 8.74867I$
$u = -0.968338 - 0.637475I$ $a = 1.292330 + 0.362604I$ $b = -0.628375 - 1.103970I$	$4.22742 - 6.07962I$	$0.91502 + 8.74867I$
$u = -1.34419$ $a = -0.408092$ $b = 1.43448$	-2.26807	34.5600
$u = 0.00435 + 1.46092I$ $a = -0.149225 + 1.012290I$ $b = 0.175413 + 0.577835I$	$8.89202 + 0.82727I$	$4.04156 + 4.08922I$
$u = 0.00435 - 1.46092I$ $a = -0.149225 - 1.012290I$ $b = 0.175413 - 0.577835I$	$8.89202 - 0.82727I$	$4.04156 - 4.08922I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.48432 + 0.24480I$ $a = -0.154170 - 0.386128I$ $b = 0.908130 + 0.483059I$	$9.88557 - 6.91082I$	$8.71754 + 5.73372I$
$u = 1.48432 - 0.24480I$ $a = -0.154170 + 0.386128I$ $b = 0.908130 - 0.483059I$	$9.88557 + 6.91082I$	$8.71754 - 5.73372I$
$u = -1.93211$ $a = 0.218986$ $b = -1.48905$	3.97174	14.1460

III. $I_1^v = \langle a,\ -6v^3+4v^2+5b-33v+13,\ v^4-v^3+6v^2-4v+1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ \frac{6}{5}v^3 - \frac{4}{5}v^2 + \frac{33}{5}v - \frac{13}{5} \end{pmatrix}$$
$$a_9 = \begin{pmatrix} \frac{6}{5}v^3 - \frac{4}{5}v^2 + \frac{33}{5}v - \frac{13}{5} \\ \frac{6}{5}v^3 - \frac{4}{5}v^2 + \frac{33}{5}v - \frac{13}{5} \end{pmatrix}$$
$$a_2 = \begin{pmatrix} \frac{3}{5}v^3 - \frac{2}{5}v^2 + \frac{24}{5}v - \frac{4}{5} \\ \frac{3}{5}v^3 - \frac{2}{5}v^2 + \frac{19}{5}v - \frac{4}{5} \end{pmatrix}$$
$$a_7 = \begin{pmatrix} \frac{6}{5}v^3 - \frac{4}{5}v^2 + \frac{33}{5}v - \frac{13}{5} \\ \frac{6}{5}v^3 - \frac{4}{5}v^2 + \frac{33}{5}v - \frac{13}{5} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} v \\ \frac{3}{5}v^3 - \frac{2}{5}v^2 + \frac{19}{5}v - \frac{4}{5} \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -\frac{1}{5}v^3 - \frac{1}{5}v^2 - \frac{8}{5}v + \frac{8}{5} \\ -\frac{3}{5}v^3 + \frac{2}{5}v^2 - \frac{19}{5}v + \frac{9}{5} \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} \frac{6}{5}v^3 - \frac{4}{5}v^2 + \frac{38}{5}v - \frac{13}{5} \\ \frac{9}{5}v^3 - \frac{6}{5}v^2 + \frac{52}{5}v - \frac{17}{5} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -v \\ -\frac{3}{5}v^3 + \frac{2}{5}v^2 - \frac{19}{5}v + \frac{4}{5} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -v \\ -\frac{3}{5}v^3 + \frac{2}{5}v^2 - \frac{19}{5}v + \frac{4}{5} \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{32}{5}v^3 + \frac{28}{5}v^2 - \frac{191}{5}v + \frac{96}{5}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$u^4 - 2u^3 + u + 1$
c_2, c_4	$(u^2 - u + 1)^2$
c_3	u^4
c_5	$(u^2 + u + 1)^2$
c_6	$(u + 1)^4$
c_7, c_8	$u^4 - u^3 + 3u^2 - u + 1$
c_9, c_{10}	$(u - 1)^4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_{11}	$y^4 - 4y^3 + 6y^2 - y + 1$
c_2, c_4, c_5	$(y^2 + y + 1)^2$
c_3	y^4
c_6, c_9, c_{10}	$(y - 1)^4$
c_7, c_8	$y^4 + 5y^3 + 9y^2 + 5y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 0.351597 + 0.233523I$ $a = 0$ $b = -0.35160 + 1.49853I$	$1.64493 + 2.02988I$	$6.24584 - 8.47377I$
$v = 0.351597 - 0.233523I$ $a = 0$ $b = -0.35160 - 1.49853I$	$1.64493 - 2.02988I$	$6.24584 + 8.47377I$
$v = 0.14840 + 2.36455I$ $a = 0$ $b = -0.148403 - 0.632502I$	$1.64493 + 2.02988I$	$-1.74584 - 2.78456I$
$v = 0.14840 - 2.36455I$ $a = 0$ $b = -0.148403 + 0.632502I$	$1.64493 - 2.02988I$	$-1.74584 + 2.78456I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^4-2u^3+u+1)(u^{13}+2u^{12}+\cdots-5u+1)$ $\cdot(u^{80}-u^{79}+\cdots+166862u+35227)$
c_2	$((u^2-u+1)^2)(u^{13}-4u^{12}+\cdots+u-1)(u^{80}+3u^{79}+\cdots+537u+55)$
c_3	$u^4(u^{13}+3u^{12}+\cdots+49u+21)(u^{80}-8u^{79}+\cdots+232u-16)$
c_4	$((u^2-u+1)^2)(u^{13}+2u^{12}+\cdots+u-1)$ $\cdot(u^{80}-3u^{79}+\cdots-1033u-173)$
c_5	$((u^2+u+1)^2)(u^{13}+4u^{12}+\cdots+u+1)(u^{80}+3u^{79}+\cdots+537u+55)$
c_6	$((u+1)^4)(u^{13}-2u^{12}+\cdots-2u-1)(u^{80}-3u^{79}+\cdots+34u+1)$
c_7	$(u^4-u^3+3u^2-u+1)$ $\cdot(u^{13}-u^{12}-2u^{11}+2u^{10}-2u^8-u^7+4u^6+3u^5-3u^3+u^2+1)$ $\cdot(u^{80}+3u^{79}+\cdots+357u-319)$
c_8	$(u^4-u^3+3u^2-u+1)$ $\cdot(u^{13}+u^{11}-3u^{10}+3u^8+4u^7-u^6-2u^5+2u^3-2u^2-u+1)$ $\cdot(u^{80}+3u^{78}+\cdots+26u+1)$
c_9, c_{10}	$((u-1)^4)(u^{13}+2u^{12}+\cdots-2u+1)(u^{80}-3u^{79}+\cdots+34u+1)$
c_{11}	$(u^4-2u^3+u+1)(u^{13}-3u^{12}+\cdots-3u+1)(u^{80}-2u^{79}+\cdots+28u+5)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^4-4y^3+6y^2-y+1)(y^{13}+4y^{12}+\cdots+29y-1)$ $\cdot(y^{80}-37y^{79}+\cdots-40557549062y+1240941529)$
c_2, c_5	$((y^2+y+1)^2)(y^{13}+6y^{12}+\cdots-11y-1)$ $\cdot(y^{80}+55y^{79}+\cdots-597359y+3025)$
c_3	$y^4(y^{13}-7y^{12}+\cdots+1057y-441)(y^{80}+8y^{79}+\cdots+1728y+256)$
c_4	$((y^2+y+1)^2)(y^{13}-12y^{12}+\cdots+13y-1)$ $\cdot(y^{80}-23y^{79}+\cdots-1094423y+29929)$
c_6, c_9, c_{10}	$((y-1)^4)(y^{13}-18y^{12}+\cdots+12y-1)(y^{80}-91y^{79}+\cdots-880y+1)$
c_7	$(y^4+5y^3+9y^2+5y+1)(y^{13}-5y^{12}+\cdots-2y-1)$ $\cdot(y^{80}+19y^{79}+\cdots+3233535y+101761)$
c_8	$(y^4+5y^3+9y^2+5y+1)(y^{13}+2y^{12}+\cdots+5y-1)$ $\cdot(y^{80}+6y^{79}+\cdots-284y+1)$
c_{11}	$(y^4-4y^3+6y^2-y+1)(y^{13}-3y^{12}+\cdots+5y-1)$ $\cdot(y^{80}-12y^{79}+\cdots-614y+25)$