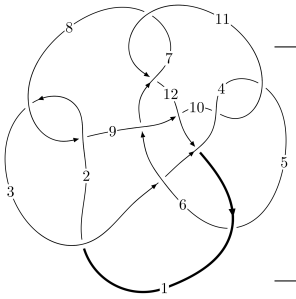
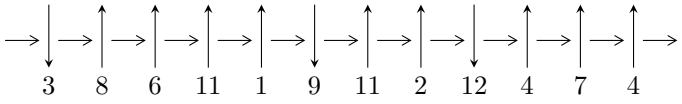
$12n_{0621}$ $(K12n_{0621})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -2.93614 \times 10^{247} u^{74} - 5.74396 \times 10^{247} u^{73} + \cdots + 4.12848 \times 10^{248} b - 5.70956 \times 10^{248},$$
$$1.02425 \times 10^{248} u^{74} + 2.08487 \times 10^{248} u^{73} + \cdots + 8.25697 \times 10^{248} a + 4.56133 \times 10^{249},\ u^{75} + 2u^{74} + \cdots + 14u$$
$$I_2^u = \langle -3110107574105 u^{27} + 3424303947942 u^{26} + \cdots + 1161098476808 b - 3547833988250,$$
$$8831335807959 u^{27} - 8605065406950 u^{26} + \cdots + 1161098476808 a + 15780292874526,$$
$$u^{28} - u^{27} + \cdots + 2u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 103 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. $\boldsymbol{I_1^u = \langle -2.94 \times 10^{247} u^{74} - 5.74 \times 10^{247} u^{73} + \cdots + 4.13 \times 10^{248} b - 5.71 \times 10^{248},\ 1.02 \times 10^{248} u^{74} + 2.08 \times 10^{248} u^{73} + \cdots + 8.26 \times 10^{248} a + 4.56 \times 10^{249},\ u^{75} + 2u^{74} + \cdots + 14u + 1 \rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -0.124047u^{74} - 0.252498u^{73} + \cdots - 19.1786u - 5.52422 \\ 0.0711190u^{74} + 0.139130u^{73} + \cdots + 10.8001u + 1.38297 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -0.0562848u^{74} - 0.118506u^{73} + \cdots - 8.19273u - 4.13684 \\ 0.0684905u^{74} + 0.133802u^{73} + \cdots + 10.8464u + 1.38143 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.438977u^{74} + 0.862197u^{73} + \cdots + 60.1161u + 7.08484 \\ -0.0864639u^{74} - 0.173895u^{73} + \cdots - 16.5768u - 0.680945 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} -0.525441u^{74} - 1.03609u^{73} + \cdots - 76.6929u - 7.76579 \\ 0.0786284u^{74} + 0.164196u^{73} + \cdots + 22.0608u + 0.532563 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0636480u^{74} + 0.130102u^{73} + \cdots + 42.4904u - 4.45507 \\ 0.0800330u^{74} + 0.158503u^{73} + \cdots + 4.65689u + 2.07918 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.456997u^{74} + 0.856393u^{73} + \cdots - 37.0559u + 4.65699 \\ -0.0506077u^{74} - 0.0881954u^{73} + \cdots + 4.56215u - 0.218959 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.456997u^{74} + 0.856393u^{73} + \cdots - 37.0559u + 4.65699 \\ -0.0587013u^{74} - 0.106320u^{73} + \cdots + 4.21274u - 0.276560 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.436497u^{74} + 0.856775u^{73} + \cdots + 59.7977u + 7.09963 \\ -0.0889433u^{74} - 0.179317u^{73} + \cdots - 16.8952u - 0.666156 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.296278u^{74} - 0.494942u^{73} + \cdots + 11.7325u + 14.5179$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{75} + 37u^{74} + \cdots - 48u - 16$
c_2, c_8	$u^{75} + u^{74} + \cdots - 8u - 4$
c_3	$u^{75} + 9u^{74} + \cdots - 284u - 19$
c_4, c_{10}	$u^{75} - u^{74} + \cdots - 2058072u - 145372$
c_5	$u^{75} - 3u^{74} + \cdots + 2493542u - 4382428$
c_6	$u^{75} - 5u^{74} + \cdots + 54618u - 5068$
c_7, c_{11}	$u^{75} - 2u^{74} + \cdots + 14u - 1$
c_9	$u^{75} - 7u^{74} + \cdots + 1121u - 691$
c_{12}	$u^{75} + 3u^{74} + \cdots - 60886u - 6196$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{75} + 21y^{74} + \cdots + 1408y - 256$
c_2, c_8	$y^{75} + 37y^{74} + \cdots - 48y - 16$
c_3	$y^{75} - y^{74} + \cdots - 9366y - 361$
c_4, c_{10}	$y^{75} + 103y^{74} + \cdots - 180569463856y - 21133018384$
c_5	$y^{75} + 59y^{74} + \cdots + 152134872802076y - 19205675175184$
c_6	$y^{75} - 19y^{74} + \cdots + 614373132y - 25684624$
c_7, c_{11}	$y^{75} + 56y^{74} + \cdots - 26y - 1$
c_9	$y^{75} - 111y^{74} + \cdots + 20483025y - 477481$
c_{12}	$y^{75} + 105y^{74} + \cdots + 337608668y - 38390416$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.338490+1.014360I$ $a=-0.083989+0.737529I$ $b=-0.225489+0.455556I$	$-1.59254-2.41045I$	0
$u=-0.338490-1.014360I$ $a=-0.083989-0.737529I$ $b=-0.225489-0.455556I$	$-1.59254+2.41045I$	0
$u=\ \ 0.343964+0.853499I$ $a=-1.63427+3.28949I$ $b=\ \ 1.11108+2.10173I$	$-5.77417+1.98856I$	0
$u=\ \ 0.343964-0.853499I$ $a=-1.63427-3.28949I$ $b=\ \ 1.11108-2.10173I$	$-5.77417-1.98856I$	0
$u=\ \ 0.812407+0.295359I$ $a=-0.650857-0.548434I$ $b=-0.49354+1.63137I$	$0.50070-3.88299I$	0
$u=\ \ 0.812407-0.295359I$ $a=-0.650857+0.548434I$ $b=-0.49354-1.63137I$	$0.50070+3.88299I$	0
$u=\ \ 0.211341+1.118520I$ $a=-0.33364+1.80730I$ $b=\ \ 0.87362+1.28162I$	$-4.06339-1.03839I$	0
$u=\ \ 0.211341-1.118520I$ $a=-0.33364-1.80730I$ $b=\ \ 0.87362-1.28162I$	$-4.06339+1.03839I$	0
$u=-0.688873+0.501015I$ $a=-0.700829-0.337773I$ $b=-0.285517+0.188871I$	$1.72423-1.07048I$	0
$u=-0.688873-0.501015I$ $a=-0.700829+0.337773I$ $b=-0.285517-0.188871I$	$1.72423+1.07048I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.533903 + 1.016930I$ $a = 1.58173 - 1.65823I$ $b = -0.15810 - 1.89823I$	$-3.86944 + 5.81407I$	0
$u = 0.533903 - 1.016930I$ $a = 1.58173 + 1.65823I$ $b = -0.15810 + 1.89823I$	$-3.86944 - 5.81407I$	0
$u = -0.545651 + 1.035230I$ $a = -0.426292 + 0.404260I$ $b = 0.052141 + 0.213347I$	$0.10985 - 3.67304I$	0
$u = -0.545651 - 1.035230I$ $a = -0.426292 - 0.404260I$ $b = 0.052141 - 0.213347I$	$0.10985 + 3.67304I$	0
$u = -0.248881 + 0.790036I$ $a = -0.094181 + 1.033320I$ $b = -0.328403 + 1.126780I$	$-1.88152 - 2.41983I$	0
$u = -0.248881 - 0.790036I$ $a = -0.094181 - 1.033320I$ $b = -0.328403 - 1.126780I$	$-1.88152 + 2.41983I$	0
$u = 0.097339 + 1.218700I$ $a = 0.222120 - 0.272580I$ $b = -0.662838 - 0.164392I$	$-0.26158 + 2.14205I$	0
$u = 0.097339 - 1.218700I$ $a = 0.222120 + 0.272580I$ $b = -0.662838 + 0.164392I$	$-0.26158 - 2.14205I$	0
$u = 1.260860 + 0.012988I$ $a = -0.813627 + 0.273446I$ $b = 0.635193 - 0.683649I$	$-4.57011 - 3.93986I$	0
$u = 1.260860 - 0.012988I$ $a = -0.813627 - 0.273446I$ $b = 0.635193 + 0.683649I$	$-4.57011 + 3.93986I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.096237 + 1.263760I$ $a = 0.068326 + 0.488408I$ $b = -0.901195 - 0.026334I$	$-6.63701 + 4.14284I$	0
$u = 0.096237 - 1.263760I$ $a = 0.068326 - 0.488408I$ $b = -0.901195 + 0.026334I$	$-6.63701 - 4.14284I$	0
$u = -0.244538 + 1.249340I$ $a = 0.273380 + 0.486740I$ $b = -0.322007 + 0.572207I$	$-1.46648 - 2.68040I$	0
$u = -0.244538 - 1.249340I$ $a = 0.273380 - 0.486740I$ $b = -0.322007 - 0.572207I$	$-1.46648 + 2.68040I$	0
$u = 0.149500 + 1.265560I$ $a = -0.23660 + 1.50686I$ $b = -0.688027 + 1.076700I$	$-8.24845 + 3.84574I$	0
$u = 0.149500 - 1.265560I$ $a = -0.23660 - 1.50686I$ $b = -0.688027 - 1.076700I$	$-8.24845 - 3.84574I$	0
$u = 0.568915 + 1.158220I$ $a = 1.14020 - 1.97951I$ $b = -0.84223 - 2.39603I$	$-2.08797 + 9.01604I$	0
$u = 0.568915 - 1.158220I$ $a = 1.14020 + 1.97951I$ $b = -0.84223 + 2.39603I$	$-2.08797 - 9.01604I$	0
$u = 0.105585 + 1.294190I$ $a = -0.094589 - 0.455966I$ $b = -1.00362 - 1.24602I$	$-8.16649 + 0.01465I$	0
$u = 0.105585 - 1.294190I$ $a = -0.094589 + 0.455966I$ $b = -1.00362 + 1.24602I$	$-8.16649 - 0.01465I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.083185 + 1.303140I$ $a = -1.44819 + 1.43760I$ $b = -2.73221 + 1.68154I$	$-9.82572 + 5.04338I$	0
$u = 0.083185 - 1.303140I$ $a = -1.44819 - 1.43760I$ $b = -2.73221 - 1.68154I$	$-9.82572 - 5.04338I$	0
$u = 0.372696 + 1.256320I$ $a = -0.65580 + 1.84410I$ $b = 0.68355 + 2.03412I$	$-5.97939 + 1.25175I$	0
$u = 0.372696 - 1.256320I$ $a = -0.65580 - 1.84410I$ $b = 0.68355 - 2.03412I$	$-5.97939 - 1.25175I$	0
$u = 1.333380 + 0.173682I$ $a = 0.811498 - 0.849545I$ $b = -1.37253 + 1.88759I$	$4.21365 + 1.49945I$	0
$u = 1.333380 - 0.173682I$ $a = 0.811498 + 0.849545I$ $b = -1.37253 - 1.88759I$	$4.21365 - 1.49945I$	0
$u = -0.289653 + 1.324520I$ $a = -1.04672 - 1.72698I$ $b = -0.82792 - 2.61892I$	$-4.21139 - 0.24470I$	0
$u = -0.289653 - 1.324520I$ $a = -1.04672 + 1.72698I$ $b = -0.82792 + 2.61892I$	$-4.21139 + 0.24470I$	0
$u = -1.42651 + 0.03741I$ $a = 0.570335 + 0.464102I$ $b = -0.76187 - 1.78511I$	$3.79263 - 2.20139I$	0
$u = -1.42651 - 0.03741I$ $a = 0.570335 - 0.464102I$ $b = -0.76187 + 1.78511I$	$3.79263 + 2.20139I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.374818 + 0.350718I$ $a = -2.80026 + 0.39715I$ $b = \quad 0.746495 + 0.170227I$	$-3.55538 - 2.70832I$	$5.95415 + 0.21604I$
$u = \quad 0.374818 - 0.350718I$ $a = -2.80026 - 0.39715I$ $b = \quad 0.746495 - 0.170227I$	$-3.55538 + 2.70832I$	$5.95415 - 0.21604I$
$u = \quad 0.456613 + 0.215336I$ $a = -0.763234 - 0.254726I$ $b = -0.097092 + 1.163740I$	$-2.17924 - 1.79406I$	$3.71045 + 3.85861I$
$u = \quad 0.456613 - 0.215336I$ $a = -0.763234 + 0.254726I$ $b = -0.097092 - 1.163740I$	$-2.17924 + 1.79406I$	$3.71045 - 3.85861I$
$u = -0.21547 + 1.48414I$ $a = -0.38029 - 1.54285I$ $b = -0.42424 - 2.38866I$	$-2.97425 - 7.62553I$	0
$u = -0.21547 - 1.48414I$ $a = -0.38029 + 1.54285I$ $b = -0.42424 + 2.38866I$	$-2.97425 + 7.62553I$	0
$u = \quad 0.084889 + 0.487616I$ $a = -4.49287 - 0.57716I$ $b = -0.733448 - 0.772570I$	$-6.72101 - 4.29646I$	$-3.76910 + 2.69049I$
$u = \quad 0.084889 - 0.487616I$ $a = -4.49287 + 0.57716I$ $b = -0.733448 + 0.772570I$	$-6.72101 + 4.29646I$	$-3.76910 - 2.69049I$
$u = -1.40921 + 0.57774I$ $a = -0.451526 + 0.502532I$ $b = -0.41328 - 2.67844I$	$-8.29796 - 0.94595I$	0
$u = -1.40921 - 0.57774I$ $a = -0.451526 - 0.502532I$ $b = -0.41328 + 2.67844I$	$-8.29796 + 0.94595I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.57774 + 1.46690I$ $a = -0.136989 - 0.135245I$ $b = 0.523608 - 0.380389I$	$-9.27086 + 10.48060I$	0
$u = 0.57774 - 1.46690I$ $a = -0.136989 + 0.135245I$ $b = 0.523608 + 0.380389I$	$-9.27086 - 10.48060I$	0
$u = 0.275445 + 0.320660I$ $a = -2.91158 - 0.02172I$ $b = 0.501597 - 0.568378I$	$-5.04243 - 2.17825I$	$3.70428 + 5.60941I$
$u = 0.275445 - 0.320660I$ $a = -2.91158 + 0.02172I$ $b = 0.501597 + 0.568378I$	$-5.04243 + 2.17825I$	$3.70428 - 5.60941I$
$u = 0.16408 + 1.56901I$ $a = -0.28564 + 1.78527I$ $b = -0.26882 + 3.41347I$	$-3.58764 + 6.75970I$	0
$u = 0.16408 - 1.56901I$ $a = -0.28564 - 1.78527I$ $b = -0.26882 - 3.41347I$	$-3.58764 - 6.75970I$	0
$u = 0.63107 + 1.45962I$ $a = 0.238033 - 0.112386I$ $b = 0.982552 - 0.988516I$	$-9.04107 + 2.56417I$	0
$u = 0.63107 - 1.45962I$ $a = 0.238033 + 0.112386I$ $b = 0.982552 + 0.988516I$	$-9.04107 - 2.56417I$	0
$u = 0.04084 + 1.60964I$ $a = 0.75777 - 1.77433I$ $b = 1.43111 - 3.73653I$	$-12.12460 - 1.13507I$	0
$u = 0.04084 - 1.60964I$ $a = 0.75777 + 1.77433I$ $b = 1.43111 + 3.73653I$	$-12.12460 + 1.13507I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.34679+1.57824I$ $a=-0.09367-1.58863I$ $b=\ \ 1.63442-2.48460I$	$-15.6106-6.7181I$	0
$u=-0.34679-1.57824I$ $a=-0.09367+1.58863I$ $b=\ \ 1.63442+2.48460I$	$-15.6106+6.7181I$	0
$u=-1.63199+0.04625I$ $a=-0.551410+0.644182I$ $b=\ \ 0.84326-2.91872I$	$-6.99114+8.56653I$	0
$u=-1.63199-0.04625I$ $a=-0.551410-0.644182I$ $b=\ \ 0.84326+2.91872I$	$-6.99114-8.56653I$	0
$u=-0.68541+1.54649I$ $a=\ \ 0.83167+1.45807I$ $b=-0.83970+3.36363I$	$-11.8545-16.4570I$	0
$u=-0.68541-1.54649I$ $a=\ \ 0.83167-1.45807I$ $b=-0.83970-3.36363I$	$-11.8545+16.4570I$	0
$u=-0.289488$ $a=-0.732575$ $b=-0.350214$	0.735693	13.9000
$u=-0.87530+1.54498I$ $a=\ \ 0.88420+1.17471I$ $b=-1.16957+3.16272I$	$-11.35710-7.66415I$	0
$u=-0.87530-1.54498I$ $a=\ \ 0.88420-1.17471I$ $b=-1.16957-3.16272I$	$-11.35710+7.66415I$	0
$u=\ \ 0.0114997+0.0911495I$ $a=-3.59923-1.96297I$ $b=\ \ 0.742740+0.718710I$	$3.67870-0.89897I$	$14.8156+6.9184I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.0114997 - 0.0911495I$ $a = -3.59923 + 1.96297I$ $b = 0.742740 - 0.718710I$	$3.67870 + 0.89897I$	$14.8156 - 6.9184I$
$u = -0.0699362 + 0.0330813I$ $a = -4.95235 - 0.65070I$ $b = 0.732305 + 0.963089I$	$2.89321 + 6.53096I$	$16.6016 - 9.8113I$
$u = -0.0699362 - 0.0330813I$ $a = -4.95235 + 0.65070I$ $b = 0.732305 - 0.963089I$	$2.89321 - 6.53096I$	$16.6016 + 9.8113I$
$u = -0.42486 + 1.87987I$ $a = 0.125652 - 1.290110I$ $b = 2.73307 - 3.01298I$	$-13.57810 + 0.08080I$	0
$u = -0.42486 - 1.87987I$ $a = 0.125652 + 1.290110I$ $b = 2.73307 + 3.01298I$	$-13.57810 - 0.08080I$	0

II.

$\boldsymbol{I_2^u = \langle -3.11\times 10^{12}u^{27}+3.42\times 10^{12}u^{26}+\cdots+1.16\times 10^{12}b-3.55\times 10^{12},\ 8.83\times 10^{12}u^{27}-8.61\times 10^{12}u^{26}+\cdots+1.16\times 10^{12}a+1.58\times 10^{13},\ u^{28}-u^{27}+\cdots+2u+1\rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -7.60602u^{27} + 7.41114u^{26} + \cdots - 28.1573u - 13.5908 \\ 2.67859u^{27} - 2.94919u^{26} + \cdots + 12.5728u + 3.05558 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -1.78909u^{27} - 0.555285u^{26} + \cdots - 7.58876u - 10.3404 \\ 3.76486u^{27} - 5.95905u^{26} + \cdots + 14.0907u + 0.906085 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 5.11967u^{27} - 3.37873u^{26} + \cdots + 23.6246u + 13.3115 \\ 2.94895u^{27} - 4.71299u^{26} + \cdots + 11.3071u + 1.62711 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} -2.17073u^{27} - 1.33426u^{26} + \cdots - 12.3175u - 11.6844 \\ 5.41544u^{27} - 5.71491u^{26} + \cdots + 17.5642u + 8.64563 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -8.33544u^{27} + 9.42656u^{26} + \cdots - 28.3241u - 7.08146 \\ 0.216883u^{27} + 2.85982u^{26} + \cdots - 3.94102u + 6.19344 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.372892u^{27} + 1.57605u^{26} + \cdots - 0.961475u + 1.05287 \\ 14.0573u^{27} - 15.2791u^{26} + \cdots + 37.7260u + 5.10418 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.372892u^{27} + 1.57605u^{26} + \cdots - 0.961475u + 1.05287 \\ 15.8214u^{27} - 16.5557u^{26} + \cdots + 41.9968u + 7.05313 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.91230u^{27} - 1.44121u^{26} + \cdots + 14.4439u + 9.80654 \\ 0.741578u^{27} - 2.77547u^{26} + \cdots + 2.12639u - 1.87788 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= -\frac{1086730167949}{145137309601}u^{27} + \frac{1111857372881}{145137309601}u^{26} + \cdots + \frac{616499354094}{145137309601}u - \frac{1697099422906}{145137309601}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{28} - 14u^{27} + \cdots - 192u + 16$
c_2	$u^{28} + 7u^{26} + \cdots + 4u + 4$
c_3	$u^{28} + 12u^{27} + \cdots - 2u + 1$
c_4	$u^{28} + 10u^{26} + \cdots - 4u + 4$
c_5	$u^{28} + 2u^{27} + \cdots + 17u + 19$
c_6	$u^{28} - 2u^{27} + \cdots + 8u + 1$
c_7	$u^{28} - u^{27} + \cdots + 2u + 1$
c_8	$u^{28} + 7u^{26} + \cdots - 4u + 4$
c_9	$u^{28} - 12u^{27} + \cdots - 915u + 107$
c_{10}	$u^{28} + 10u^{26} + \cdots + 4u + 4$
c_{11}	$u^{28} + u^{27} + \cdots - 2u + 1$
c_{12}	$u^{28} - 2u^{27} + \cdots - 18u + 4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{28} + 18y^{27} + \cdots + 896y + 256$
c_2, c_8	$y^{28} + 14y^{27} + \cdots + 192y + 16$
c_3	$y^{28} - 8y^{27} + \cdots - 6y + 1$
c_4, c_{10}	$y^{28} + 20y^{27} + \cdots - 320y + 16$
c_5	$y^{28} + 24y^{27} + \cdots - 23y + 361$
c_6	$y^{28} + 6y^{27} + \cdots - 18y + 1$
c_7, c_{11}	$y^{28} + 13y^{27} + \cdots + 18y + 1$
c_9	$y^{28} - 38y^{27} + \cdots - 228181y + 11449$
c_{12}	$y^{28} + 18y^{27} + \cdots - 188y + 16$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.267770+0.909697I$ $a=\ 0.280589-0.101358I$ $b=\ 0.215003-0.699264I$	$-2.54295-2.48178I$	$-4.22697+3.94108I$
$u=-0.267770-0.909697I$ $a=\ 0.280589+0.101358I$ $b=\ 0.215003+0.699264I$	$-2.54295+2.48178I$	$-4.22697-3.94108I$
$u=\ 0.362419+0.834030I$ $a=-1.26402+1.33981I$ $b=\ 0.585168+0.359472I$	$-5.62897-1.61321I$	$-4.30162+0.11645I$
$u=\ 0.362419-0.834030I$ $a=-1.26402-1.33981I$ $b=\ 0.585168-0.359472I$	$-5.62897+1.61321I$	$-4.30162-0.11645I$
$u=\ 0.627755+0.556467I$ $a=\ 2.60329+0.16051I$ $b=\ 0.350971-0.812210I$	$-6.12012+5.18333I$	$1.32357-7.61307I$
$u=\ 0.627755-0.556467I$ $a=\ 2.60329-0.16051I$ $b=\ 0.350971+0.812210I$	$-6.12012-5.18333I$	$1.32357+7.61307I$
$u=-0.465065+1.105660I$ $a=-0.414926+0.141473I$ $b=\ 0.279697+0.134622I$	$1.07312-3.66281I$	$10.39366+3.77091I$
$u=-0.465065-1.105660I$ $a=-0.414926-0.141473I$ $b=\ 0.279697-0.134622I$	$1.07312+3.66281I$	$10.39366-3.77091I$
$u=\ 0.154178+1.190760I$ $a=\ 0.12549+2.33363I$ $b=\ 1.24172+2.16205I$	$-3.93257+1.78428I$	$1.74978-2.39317I$
$u=\ 0.154178-1.190760I$ $a=\ 0.12549-2.33363I$ $b=\ 1.24172-2.16205I$	$-3.93257-1.78428I$	$1.74978+2.39317I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.150395 + 1.280860I$ $a = -0.400844 + 1.298880I$ $b = -0.99270 + 1.02546I$	$-7.93382 + 3.89142I$	$7.52926 - 5.54653I$
$u = 0.150395 - 1.280860I$ $a = -0.400844 - 1.298880I$ $b = -0.99270 - 1.02546I$	$-7.93382 - 3.89142I$	$7.52926 + 5.54653I$
$u = -1.269260 + 0.242314I$ $a = -0.768342 - 0.629330I$ $b = 1.11091 + 1.20232I$	$4.43645 - 1.13982I$	$13.0180 - 6.8027I$
$u = -1.269260 - 0.242314I$ $a = -0.768342 + 0.629330I$ $b = 1.11091 - 1.20232I$	$4.43645 + 1.13982I$	$13.0180 + 6.8027I$
$u = -0.513572 + 0.422844I$ $a = 3.33506 + 0.67192I$ $b = -0.17326 + 2.09327I$	$-4.94963 - 1.55164I$	$4.98769 - 1.02506I$
$u = -0.513572 - 0.422844I$ $a = 3.33506 - 0.67192I$ $b = -0.17326 - 2.09327I$	$-4.94963 + 1.55164I$	$4.98769 + 1.02506I$
$u = -0.187112 + 0.634531I$ $a = -0.503081 - 0.409592I$ $b = -0.922975 + 0.452604I$	$3.31096 + 0.53664I$	$2.87535 + 3.58863I$
$u = -0.187112 - 0.634531I$ $a = -0.503081 + 0.409592I$ $b = -0.922975 - 0.452604I$	$3.31096 - 0.53664I$	$2.87535 - 3.58863I$
$u = 0.504372 + 1.260390I$ $a = 0.85057 - 1.87567I$ $b = -0.64684 - 2.46436I$	$-1.06035 + 9.01292I$	$7.26243 - 7.29203I$
$u = 0.504372 - 1.260390I$ $a = 0.85057 + 1.87567I$ $b = -0.64684 + 2.46436I$	$-1.06035 - 9.01292I$	$7.26243 + 7.29203I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.267072+0.558984I$ $a=-1.13225+2.47654I$ $b=-0.289227-0.426768I$	$-3.73140-3.55454I$	$3.29778+9.44776I$
$u=-0.267072-0.558984I$ $a=-1.13225-2.47654I$ $b=-0.289227+0.426768I$	$-3.73140+3.55454I$	$3.29778-9.44776I$
$u=0.068068+0.588251I$ $a=-0.684205-0.594437I$ $b=-1.019310+0.843066I$	$2.48894-6.40615I$	$-2.05643+3.86667I$
$u=0.068068-0.588251I$ $a=-0.684205+0.594437I$ $b=-1.019310-0.843066I$	$2.48894+6.40615I$	$-2.05643-3.86667I$
$u=1.52856+0.19094I$ $a=-0.557845-0.638107I$ $b=0.42693+2.77654I$	$3.46736-2.79927I$	$1.59409+8.64873I$
$u=1.52856-0.19094I$ $a=-0.557845+0.638107I$ $b=0.42693-2.77654I$	$3.46736+2.79927I$	$1.59409-8.64873I$
$u=0.07410+1.70425I$ $a=0.53052-1.55664I$ $b=0.83392-3.73132I$	$-11.77570-1.30163I$	$9.05337+7.46743I$
$u=0.07410-1.70425I$ $a=0.53052+1.55664I$ $b=0.83392+3.73132I$	$-11.77570+1.30163I$	$9.05337-7.46743I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{28}-14u^{27}+\cdots-192u+16)(u^{75}+37u^{74}+\cdots-48u-16)$
c_2	$(u^{28}+7u^{26}+\cdots+4u+4)(u^{75}+u^{74}+\cdots-8u-4)$
c_3	$(u^{28}+12u^{27}+\cdots-2u+1)(u^{75}+9u^{74}+\cdots-284u-19)$
c_4	$(u^{28}+10u^{26}+\cdots-4u+4)(u^{75}-u^{74}+\cdots-2058072u-145372)$
c_5	$(u^{28}+2u^{27}+\cdots+17u+19)$ $\cdot(u^{75}-3u^{74}+\cdots+2493542u-4382428)$
c_6	$(u^{28}-2u^{27}+\cdots+8u+1)(u^{75}-5u^{74}+\cdots+54618u-5068)$
c_7	$(u^{28}-u^{27}+\cdots+2u+1)(u^{75}-2u^{74}+\cdots+14u-1)$
c_8	$(u^{28}+7u^{26}+\cdots-4u+4)(u^{75}+u^{74}+\cdots-8u-4)$
c_9	$(u^{28}-12u^{27}+\cdots-915u+107)(u^{75}-7u^{74}+\cdots+1121u-691)$
c_{10}	$(u^{28}+10u^{26}+\cdots+4u+4)(u^{75}-u^{74}+\cdots-2058072u-145372)$
c_{11}	$(u^{28}+u^{27}+\cdots-2u+1)(u^{75}-2u^{74}+\cdots+14u-1)$
c_{12}	$(u^{28}-2u^{27}+\cdots-18u+4)(u^{75}+3u^{74}+\cdots-60886u-6196)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{28}+18y^{27}+\cdots+896y+256)(y^{75}+21y^{74}+\cdots+1408y-256)$
c_2, c_8	$(y^{28}+14y^{27}+\cdots+192y+16)(y^{75}+37y^{74}+\cdots-48y-16)$
c_3	$(y^{28}-8y^{27}+\cdots-6y+1)(y^{75}-y^{74}+\cdots-9366y-361)$
c_4, c_{10}	$(y^{28}+20y^{27}+\cdots-320y+16)$ $\cdot(y^{75}+103y^{74}+\cdots-180569463856y-21133018384)$
c_5	$(y^{28}+24y^{27}+\cdots-23y+361)$ $\cdot(y^{75}+59y^{74}+\cdots+152134872802076y-19205675175184)$
c_6	$(y^{28}+6y^{27}+\cdots-18y+1)$ $\cdot(y^{75}-19y^{74}+\cdots+614373132y-25684624)$
c_7, c_{11}	$(y^{28}+13y^{27}+\cdots+18y+1)(y^{75}+56y^{74}+\cdots-26y-1)$
c_9	$(y^{28}-38y^{27}+\cdots-228181y+11449)$ $\cdot(y^{75}-111y^{74}+\cdots+20483025y-477481)$
c_{12}	$(y^{28}+18y^{27}+\cdots-188y+16)$ $\cdot(y^{75}+105y^{74}+\cdots+337608668y-38390416)$