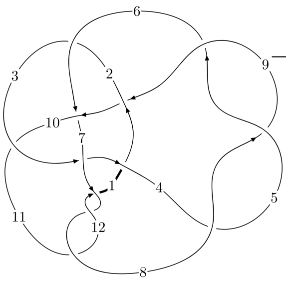
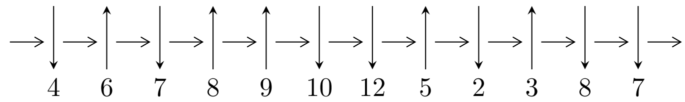
$12n_{0711}$ $(K12n_{0711})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle &-1.02480 \times 10^{144} u^{75} + 2.72391 \times 10^{145} u^{74} + \cdots + 1.00707 \times 10^{147} b - 2.72299 \times 10^{147}, \\ &- 1.35943 \times 10^{147} u^{75} - 2.53685 \times 10^{147} u^{74} + \cdots + 2.71908 \times 10^{148} a + 9.43984 \times 10^{148}, \\ &u^{76} + 2u^{75} + \cdots + 32u + 27 \rangle \\ I_2^u = \langle &28u^{19} + 35u^{18} + \cdots + 67b + 22,\ 15u^{19} + 2u^{18} + \cdots + 67a - 194,\ u^{20} + u^{19} + \cdots + 4u^2 + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 96 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. $\boldsymbol{I_1^u = \langle -1.02 \times 10^{144} u^{75} + 2.72 \times 10^{145} u^{74} + \cdots + 1.01 \times 10^{147} b - 2.72 \times 10^{147},\ -1.36 \times 10^{147} u^{75} - 2.54 \times 10^{147} u^{74} + \cdots + 2.72 \times 10^{148} a + 9.44 \times 10^{148},\ u^{76} + 2u^{75} + \cdots + 32u + 27 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0.0499959u^{75} + 0.0932981u^{74} + \cdots + 14.5526u - 3.47170 \\ 0.00101760u^{75} - 0.0270480u^{74} + \cdots + 9.57085u + 2.70389 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.0527844u^{75} + 0.0417033u^{74} + \cdots + 27.5284u + 7.01584 \\ -0.0139024u^{75} - 0.0236058u^{74} + \cdots - 5.70988u + 2.14183 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.157862u^{75} - 0.367093u^{74} + \cdots - 8.05823u + 2.08138 \\ -0.0836878u^{75} - 0.135451u^{74} + \cdots + 2.18214u + 0.663016 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.0612921u^{75} - 0.196218u^{74} + \cdots - 0.851626u + 2.23369 \\ -0.0359843u^{75} - 0.0719567u^{74} + \cdots + 3.76665u + 1.20983 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.0741741u^{75} - 0.231641u^{74} + \cdots - 10.2404u + 1.41836 \\ -0.0836878u^{75} - 0.135451u^{74} + \cdots + 2.18214u + 0.663016 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.0499959u^{75} + 0.0932981u^{74} + \cdots + 14.5526u - 3.47170 \\ 0.0136984u^{75} + 0.00972375u^{74} + \cdots + 10.7065u + 2.52316 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.0242324u^{75} + 0.132596u^{74} + \cdots + 2.52604u - 10.7945 \\ 0.110043u^{75} + 0.116092u^{74} + \cdots - 5.22698u - 0.286295 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.351617u^{75} + 0.565791u^{74} + \cdots + 64.9845u + 17.3733$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{76} + 5u^{75} + \cdots - 9804u + 1444$
c_2	$u^{76} - 5u^{75} + \cdots - 124u - 23$
c_3	$u^{76} - 2u^{75} + \cdots + 76u + 2633$
c_4, c_5, c_8	$u^{76} - 2u^{75} + \cdots - 32u + 27$
c_6	$u^{76} - 9u^{74} + \cdots - 22u + 19$
c_7, c_{11}, c_{12}	$u^{76} + 13u^{74} + \cdots - 82u + 43$
c_9	$u^{76} - 3u^{75} + \cdots - 397u + 71$
c_{10}	$u^{76} - 3u^{75} + \cdots + 1147u + 447$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{76} - 67y^{75} + \cdots + 4349328y + 2085136$
c_2	$y^{76} - 19y^{75} + \cdots - 82030y + 529$
c_3	$y^{76} - 62y^{75} + \cdots - 205858982y + 6932689$
c_4, c_5, c_8	$y^{76} - 76y^{75} + \cdots + 52976y + 729$
c_6	$y^{76} - 18y^{75} + \cdots - 15152y + 361$
c_7, c_{11}, c_{12}	$y^{76} + 26y^{75} + \cdots + 34556y + 1849$
c_9	$y^{76} + 15y^{75} + \cdots + 88335y + 5041$
c_{10}	$y^{76} + 13y^{75} + \cdots + 10810607y + 199809$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.335219 + 0.952463I$ $a = 1.062340 + 0.659919I$ $b = 0.150378 + 1.163430I$	$-5.21982 - 4.95583I$	0
$u = -0.335219 - 0.952463I$ $a = 1.062340 - 0.659919I$ $b = 0.150378 - 1.163430I$	$-5.21982 + 4.95583I$	0
$u = -0.178055 + 0.889122I$ $a = -0.666647 + 0.389184I$ $b = -1.159090 + 0.249170I$	$1.66667 - 4.02641I$	$0. + 11.13609I$
$u = -0.178055 - 0.889122I$ $a = -0.666647 - 0.389184I$ $b = -1.159090 - 0.249170I$	$1.66667 + 4.02641I$	$0. - 11.13609I$
$u = 0.525368 + 0.975309I$ $a = 0.462645 + 1.130730I$ $b = 0.78335 + 1.42794I$	$-4.41523 + 11.68720I$	0
$u = 0.525368 - 0.975309I$ $a = 0.462645 - 1.130730I$ $b = 0.78335 - 1.42794I$	$-4.41523 - 11.68720I$	0
$u = -0.711614 + 0.490004I$ $a = 0.611255 - 0.464779I$ $b = 0.181183 - 0.021532I$	$1.27366 - 1.54173I$	$3.50559 + 0.I$
$u = -0.711614 - 0.490004I$ $a = 0.611255 + 0.464779I$ $b = 0.181183 + 0.021532I$	$1.27366 + 1.54173I$	$3.50559 + 0.I$
$u = 1.14400$ $a = -0.948499$ $b = -0.215745$	-2.20411	0
$u = -0.202334 + 1.146190I$ $a = 0.647997 - 0.848827I$ $b = 0.430923 - 1.278420I$	$-1.76191 - 3.13440I$	0

Solutions to I^u_1	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.202334 - 1.146190I$ $a = 0.647997 + 0.848827I$ $b = 0.430923 + 1.278420I$	$-1.76191 + 3.13440I$	0
$u = -1.174240 + 0.252442I$ $a = -0.611112 + 0.449227I$ $b = -0.396824 - 0.716749I$	$-1.05451 + 1.17178I$	0
$u = -1.174240 - 0.252442I$ $a = -0.611112 - 0.449227I$ $b = -0.396824 + 0.716749I$	$-1.05451 - 1.17178I$	0
$u = 1.238270 + 0.109890I$ $a = -0.926139 - 0.563020I$ $b = 0.184791 + 0.103677I$	$-0.15602 - 2.47239I$	0
$u = 1.238270 - 0.109890I$ $a = -0.926139 + 0.563020I$ $b = 0.184791 - 0.103677I$	$-0.15602 + 2.47239I$	0
$u = 0.747450$ $a = -0.637437$ $b = -0.905014$	-2.42462	-4.01110
$u = 0.634961 + 0.372638I$ $a = -0.314128 + 0.853405I$ $b = -0.091984 + 1.090970I$	$0.16002 + 4.03023I$	$-2.04460 - 10.11479I$
$u = 0.634961 - 0.372638I$ $a = -0.314128 - 0.853405I$ $b = -0.091984 - 1.090970I$	$0.16002 - 4.03023I$	$-2.04460 + 10.11479I$
$u = -1.257720 + 0.166055I$ $a = -0.746919 + 0.518415I$ $b = 0.399959 - 0.632265I$	$-0.450371 - 1.016900I$	0
$u = -1.257720 - 0.166055I$ $a = -0.746919 - 0.518415I$ $b = 0.399959 + 0.632265I$	$-0.450371 + 1.016900I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.789767 + 1.016560I$ $a = 0.923614 - 0.121588I$ $b = 0.088501 - 0.909369I$	$-3.79850 - 5.20157I$	0
$u = 0.789767 - 1.016560I$ $a = 0.923614 + 0.121588I$ $b = 0.088501 + 0.909369I$	$-3.79850 + 5.20157I$	0
$u = -1.014430 + 0.821372I$ $a = -0.011572 - 0.978844I$ $b = 0.77138 - 1.60224I$	$-3.37044 - 1.02943I$	0
$u = -1.014430 - 0.821372I$ $a = -0.011572 + 0.978844I$ $b = 0.77138 + 1.60224I$	$-3.37044 + 1.02943I$	0
$u = 1.354330 + 0.034566I$ $a = -0.355159 - 0.633725I$ $b = 1.72523 - 0.83396I$	$6.59906 - 2.06008I$	0
$u = 1.354330 - 0.034566I$ $a = -0.355159 + 0.633725I$ $b = 1.72523 + 0.83396I$	$6.59906 + 2.06008I$	0
$u = -1.352470 + 0.091220I$ $a = -0.452501 + 0.509412I$ $b = 2.09424 + 0.03971I$	$6.22160 - 3.70134I$	0
$u = -1.352470 - 0.091220I$ $a = -0.452501 - 0.509412I$ $b = 2.09424 - 0.03971I$	$6.22160 + 3.70134I$	0
$u = 1.354550 + 0.202068I$ $a = 0.461925 - 0.797105I$ $b = -1.87703 - 1.23809I$	$0.19010 + 7.12458I$	0
$u = 1.354550 - 0.202068I$ $a = 0.461925 + 0.797105I$ $b = -1.87703 + 1.23809I$	$0.19010 - 7.12458I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.364060 + 0.156000I$ $a = 0.327441 - 0.829687I$ $b = -1.29343 - 2.14767I$	$0.29364 + 3.54039I$	0
$u = 1.364060 - 0.156000I$ $a = 0.327441 + 0.829687I$ $b = -1.29343 + 2.14767I$	$0.29364 - 3.54039I$	0
$u = 1.356250 + 0.217693I$ $a = -0.339965 - 0.976740I$ $b = 0.439699 - 1.333720I$	$8.27803 - 1.11792I$	0
$u = 1.356250 - 0.217693I$ $a = -0.339965 + 0.976740I$ $b = 0.439699 + 1.333720I$	$8.27803 + 1.11792I$	0
$u = -1.371200 + 0.168132I$ $a = -0.130034 + 1.111990I$ $b = -0.01517 + 1.48792I$	$8.82106 - 5.99255I$	0
$u = -1.371200 - 0.168132I$ $a = -0.130034 - 1.111990I$ $b = -0.01517 - 1.48792I$	$8.82106 + 5.99255I$	0
$u = -1.382190 + 0.164386I$ $a = 0.440963 + 1.011550I$ $b = -1.01477 + 1.50773I$	$1.31274 - 6.74682I$	0
$u = -1.382190 - 0.164386I$ $a = 0.440963 - 1.011550I$ $b = -1.01477 - 1.50773I$	$1.31274 + 6.74682I$	0
$u = -0.450364 + 0.405755I$ $a = 0.601796 - 1.157140I$ $b = 0.496255 - 0.470062I$	$0.64900 - 1.50177I$	$0.08009 + 5.08857I$
$u = -0.450364 - 0.405755I$ $a = 0.601796 + 1.157140I$ $b = 0.496255 + 0.470062I$	$0.64900 + 1.50177I$	$0.08009 - 5.08857I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.085145 + 0.597383I$ $a = -1.24522 + 1.45142I$ $b = -0.99539 + 1.09484I$	$-4.39381 - 4.30048I$	$-8.88569 + 7.94405I$
$u = -0.085145 - 0.597383I$ $a = -1.24522 - 1.45142I$ $b = -0.99539 - 1.09484I$	$-4.39381 + 4.30048I$	$-8.88569 - 7.94405I$
$u = -1.394540 + 0.190085I$ $a = 0.600186 + 0.805977I$ $b = -1.27776 + 1.08700I$	$0.45871 - 4.89022I$	0
$u = -1.394540 - 0.190085I$ $a = 0.600186 - 0.805977I$ $b = -1.27776 - 1.08700I$	$0.45871 + 4.89022I$	0
$u = -1.34800 + 0.44161I$ $a = 0.742314 - 0.126395I$ $b = -0.311972 + 0.479712I$	$2.07256 - 2.52727I$	0
$u = -1.34800 - 0.44161I$ $a = 0.742314 + 0.126395I$ $b = -0.311972 - 0.479712I$	$2.07256 + 2.52727I$	0
$u = 1.38945 + 0.30604I$ $a = 0.256183 - 0.685054I$ $b = -1.69118 - 0.24166I$	$6.68232 + 8.14879I$	0
$u = 1.38945 - 0.30604I$ $a = 0.256183 + 0.685054I$ $b = -1.69118 + 0.24166I$	$6.68232 - 8.14879I$	0
$u = 0.191544 + 0.536045I$ $a = -0.62821 - 2.03828I$ $b = -0.752490 - 0.881582I$	$-4.64760 + 2.27181I$	$-11.69609 - 2.47531I$
$u = 0.191544 - 0.536045I$ $a = -0.62821 + 2.03828I$ $b = -0.752490 + 0.881582I$	$-4.64760 - 2.27181I$	$-11.69609 + 2.47531I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.241599 + 0.511210I$ $a = 0.661629 - 0.856430I$ $b = -0.221305 - 0.547954I$	$-1.15458 - 0.86356I$	$-6.32547 + 1.72362I$
$u = 0.241599 - 0.511210I$ $a = 0.661629 + 0.856430I$ $b = -0.221305 + 0.547954I$	$-1.15458 + 0.86356I$	$-6.32547 - 1.72362I$
$u = 1.45709 + 0.37188I$ $a = 0.808172 + 0.206134I$ $b = -0.277686 - 0.549919I$	$0.47898 + 9.68599I$	0
$u = 1.45709 - 0.37188I$ $a = 0.808172 - 0.206134I$ $b = -0.277686 + 0.549919I$	$0.47898 - 9.68599I$	0
$u = -0.038731 + 0.471932I$ $a = -1.78603 + 1.67997I$ $b = -0.45927 + 1.36321I$	$-4.26270 - 1.36015I$	$-8.18769 - 1.27629I$
$u = -0.038731 - 0.471932I$ $a = -1.78603 - 1.67997I$ $b = -0.45927 - 1.36321I$	$-4.26270 + 1.36015I$	$-8.18769 + 1.27629I$
$u = 0.061494 + 0.467951I$ $a = -2.87482 - 0.70612I$ $b = 0.223982 - 0.279494I$	$4.10268 + 3.72750I$	$-9.57520 - 1.56153I$
$u = 0.061494 - 0.467951I$ $a = -2.87482 + 0.70612I$ $b = 0.223982 + 0.279494I$	$4.10268 - 3.72750I$	$-9.57520 + 1.56153I$
$u = 0.118059 + 0.454888I$ $a = -1.75474 - 2.38858I$ $b = -0.514860 - 0.923483I$	$-3.57058 + 4.51054I$	$-6.33549 - 11.71325I$
$u = 0.118059 - 0.454888I$ $a = -1.75474 + 2.38858I$ $b = -0.514860 + 0.923483I$	$-3.57058 - 4.51054I$	$-6.33549 + 11.71325I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.49892 + 0.39031I$ $a = 0.158369 + 0.476191I$ $b = -1.297920 + 0.101001I$	$5.87883 - 1.48945I$	0
$u = -1.49892 - 0.39031I$ $a = 0.158369 - 0.476191I$ $b = -1.297920 - 0.101001I$	$5.87883 + 1.48945I$	0
$u = 1.56484 + 0.04172I$ $a = -0.187738 + 0.600183I$ $b = 0.94126 + 1.66599I$	$7.33785 + 2.67372I$	0
$u = 1.56484 - 0.04172I$ $a = -0.187738 - 0.600183I$ $b = 0.94126 - 1.66599I$	$7.33785 - 2.67372I$	0
$u = -1.56736 + 0.09299I$ $a = -0.150006 - 0.374073I$ $b = 0.18461 - 2.24549I$	$7.55766 - 5.64826I$	0
$u = -1.56736 - 0.09299I$ $a = -0.150006 + 0.374073I$ $b = 0.18461 + 2.24549I$	$7.55766 + 5.64826I$	0
$u = 1.52282 + 0.42768I$ $a = -0.259844 + 0.830170I$ $b = 1.31486 + 1.59000I$	$3.98985 + 8.76840I$	0
$u = 1.52282 - 0.42768I$ $a = -0.259844 - 0.830170I$ $b = 1.31486 - 1.59000I$	$3.98985 - 8.76840I$	0
$u = -1.55558 + 0.36036I$ $a = -0.328563 - 0.830840I$ $b = 1.47602 - 1.64277I$	$2.2777 - 16.5535I$	0
$u = -1.55558 - 0.36036I$ $a = -0.328563 + 0.830840I$ $b = 1.47602 + 1.64277I$	$2.2777 + 16.5535I$	0

Solutions to I_1^u		$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$1.59384+0.13900I$		
$a=$	$0.120923+0.572897I$	$9.11175+3.90003I$	0
$b=$	$0.265220+0.857793I$		
$u=$	$1.59384-0.13900I$		
$a=$	$0.120923-0.572897I$	$9.11175-3.90003I$	0
$b=$	$0.265220-0.857793I$		
$u=$	$-1.74009+0.05337I$		
$a=$	$0.248000-0.330905I$	$5.99429+0.37796I$	0
$b=$	$-0.630837-0.431299I$		
$u=$	$-1.74009-0.05337I$		
$a=$	$0.248000+0.330905I$	$5.99429-0.37796I$	0
$b=$	$-0.630837+0.431299I$		
$u=$	$-0.045790+0.176383I$		
$a=$	$-3.55491+1.36184I$	$1.79959+2.62972I$	$7.61232+1.73104I$
$b=$	$1.68750+0.71252I$		
$u=$	$-0.045790-0.176383I$		
$a=$	$-3.55491-1.36184I$	$1.79959-2.62972I$	$7.61232-1.73104I$
$b=$	$1.68750-0.71252I$		

II. $I_2^u = \langle 28u^{19} + 35u^{18} + \cdots + 67b + 22,\ 15u^{19} + 2u^{18} + \cdots + 67a - 194,\ u^{20} + u^{19} + \cdots + 4u^2 + 1\rangle$

(i) Arc colorings

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

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

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

$$a_9 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.223881u^{19} - 0.0298507u^{18} + \cdots + 4.58209u + 2.89552 \\ -0.417910u^{19} - 0.522388u^{18} + \cdots - 0.313433u - 0.328358 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1.52239u^{19} + 1.40299u^{18} + \cdots + 5.64179u - 1.08955 \\ -0.0149254u^{19} - 0.268657u^{18} + \cdots - 0.761194u + 0.0597015 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.283582u^{19} - 1.10448u^{18} + \cdots - 4.46269u - 0.865672 \\ -0.298507u^{19} - 0.373134u^{18} + \cdots + 0.776119u + 0.194030 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.283582u^{19} - 1.10448u^{18} + \cdots - 4.46269u + 0.134328 \\ -0.343284u^{19} - 0.179104u^{18} + \cdots + 0.492537u + 0.373134 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0149254u^{19} - 0.731343u^{18} + \cdots - 5.23881u - 1.05970 \\ -0.298507u^{19} - 0.373134u^{18} + \cdots + 0.776119u + 0.194030 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.223881u^{19} - 0.0298507u^{18} + \cdots + 4.58209u + 2.89552 \\ -0.716418u^{19} - 0.895522u^{18} + \cdots - 0.537313u - 0.134328 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.417910u^{19} - 0.522388u^{18} + \cdots + 2.68657u + 2.67164 \\ 0.358209u^{19} + 0.447761u^{18} + \cdots + 0.268657u - 0.432836 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{191}{67}u^{19} - \frac{423}{67}u^{18} + \cdots - \frac{294}{67}u + \frac{563}{67}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20} - 10u^{19} + \cdots - 48u + 16$
c_2	$u^{20} - 2u^{19} + \cdots - 6u + 1$
c_3	$u^{20} + 3u^{19} + \cdots + 2u + 1$
c_4, c_5	$u^{20} + u^{19} + \cdots + 4u^2 + 1$
c_6	$u^{20} + u^{19} + \cdots - 6u^2 + 1$
c_7	$u^{20} + u^{19} + \cdots + 2u + 1$
c_8	$u^{20} - u^{19} + \cdots + 4u^2 + 1$
c_9	$u^{20} + 3u^{18} + \cdots - u + 1$
c_{10}	$u^{20} + 4u^{19} + \cdots - 25u + 11$
c_{11}, c_{12}	$u^{20} - u^{19} + \cdots - 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{20} - 4y^{19} + \cdots + 5248y + 256$
c_2	$y^{20} - 8y^{19} + \cdots - 6y + 1$
c_3	$y^{20} - 11y^{19} + \cdots + 14y + 1$
c_4, c_5, c_8	$y^{20} - 25y^{19} + \cdots + 8y + 1$
c_6	$y^{20} - 7y^{19} + \cdots - 12y + 1$
c_7, c_{11}, c_{12}	$y^{20} + 13y^{19} + \cdots + 16y + 1$
c_9	$y^{20} + 6y^{19} + \cdots + 3y + 1$
c_{10}	$y^{20} + 4y^{19} + \cdots - 97y + 121$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.170850 + 0.117267I$ $a = -0.665048 + 0.367111I$ $b = -0.291199 - 0.534072I$	$-1.081310 + 0.351894I$	$-1.49914 + 0.85602I$
$u = -1.170850 - 0.117267I$ $a = -0.665048 - 0.367111I$ $b = -0.291199 + 0.534072I$	$-1.081310 - 0.351894I$	$-1.49914 - 0.85602I$
$u = -0.642529 + 0.457629I$ $a = 0.07992 + 1.50403I$ $b = -0.87590 + 1.35328I$	$-3.18447 - 2.24217I$	$-1.06358 + 3.57048I$
$u = -0.642529 - 0.457629I$ $a = 0.07992 - 1.50403I$ $b = -0.87590 - 1.35328I$	$-3.18447 + 2.24217I$	$-1.06358 - 3.57048I$
$u = 1.361170 + 0.159080I$ $a = 0.526032 - 0.892774I$ $b = -1.35610 - 1.30894I$	$0.80312 + 5.92906I$	$-0.94753 - 4.21482I$
$u = 1.361170 - 0.159080I$ $a = 0.526032 + 0.892774I$ $b = -1.35610 + 1.30894I$	$0.80312 - 5.92906I$	$-0.94753 + 4.21482I$
$u = 0.260151 + 0.547229I$ $a = -1.92539 + 0.59830I$ $b = -0.472352 + 0.815038I$	$-3.24035 - 3.66790I$	$-1.40187 + 2.59215I$
$u = 0.260151 - 0.547229I$ $a = -1.92539 - 0.59830I$ $b = -0.472352 - 0.815038I$	$-3.24035 + 3.66790I$	$-1.40187 - 2.59215I$
$u = -0.290039 + 0.503457I$ $a = 0.870617 - 0.445006I$ $b = 1.172230 - 0.775670I$	$1.43868 - 3.08587I$	$-0.56236 + 7.48398I$
$u = -0.290039 - 0.503457I$ $a = 0.870617 + 0.445006I$ $b = 1.172230 + 0.775670I$	$1.43868 + 3.08587I$	$-0.56236 - 7.48398I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.47639 + 0.22931I$ $a = 0.293760 + 0.814230I$ $b = -0.83780 + 1.31087I$	$8.97543 - 1.39766I$	$10.59066 + 1.96632I$
$u = 1.47639 - 0.22931I$ $a = 0.293760 - 0.814230I$ $b = -0.83780 - 1.31087I$	$8.97543 + 1.39766I$	$10.59066 - 1.96632I$
$u = -1.50224 + 0.09636I$ $a = 0.010758 - 0.842029I$ $b = -0.396118 - 1.123700I$	$10.42730 - 5.27034I$	$7.14220 + 4.45272I$
$u = -1.50224 - 0.09636I$ $a = 0.010758 + 0.842029I$ $b = -0.396118 + 1.123700I$	$10.42730 + 5.27034I$	$7.14220 - 4.45272I$
$u = 1.54232 + 0.11586I$ $a = 0.011017 + 0.434673I$ $b = 1.14192 + 2.07996I$	$7.94037 + 5.10035I$	$6.14281 - 2.74611I$
$u = 1.54232 - 0.11586I$ $a = 0.011017 - 0.434673I$ $b = 1.14192 - 2.07996I$	$7.94037 - 5.10035I$	$6.14281 + 2.74611I$
$u = 0.171585 + 0.330782I$ $a = 2.94933 + 1.88724I$ $b = -0.662807 + 0.047941I$	$4.49188 + 3.80357I$	$11.13661 - 5.52832I$
$u = 0.171585 - 0.330782I$ $a = 2.94933 - 1.88724I$ $b = -0.662807 - 0.047941I$	$4.49188 - 3.80357I$	$11.13661 + 5.52832I$
$u = -1.70595 + 0.23895I$ $a = -0.150987 - 0.354749I$ $b = 1.078120 - 0.383730I$	$6.32800 - 1.11795I$	$10.96220 + 2.32114I$
$u = -1.70595 - 0.23895I$ $a = -0.150987 + 0.354749I$ $b = 1.078120 + 0.383730I$	$6.32800 + 1.11795I$	$10.96220 - 2.32114I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20}-10u^{19}+\cdots-48u+16)(u^{76}+5u^{75}+\cdots-9804u+1444)$
c_2	$(u^{20}-2u^{19}+\cdots-6u+1)(u^{76}-5u^{75}+\cdots-124u-23)$
c_3	$(u^{20}+3u^{19}+\cdots+2u+1)(u^{76}-2u^{75}+\cdots+76u+2633)$
c_4, c_5	$(u^{20}+u^{19}+\cdots+4u^2+1)(u^{76}-2u^{75}+\cdots-32u+27)$
c_6	$(u^{20}+u^{19}+\cdots-6u^2+1)(u^{76}-9u^{74}+\cdots-22u+19)$
c_7	$(u^{20}+u^{19}+\cdots+2u+1)(u^{76}+13u^{74}+\cdots-82u+43)$
c_8	$(u^{20}-u^{19}+\cdots+4u^2+1)(u^{76}-2u^{75}+\cdots-32u+27)$
c_9	$(u^{20}+3u^{18}+\cdots-u+1)(u^{76}-3u^{75}+\cdots-397u+71)$
c_{10}	$(u^{20}+4u^{19}+\cdots-25u+11)(u^{76}-3u^{75}+\cdots+1147u+447)$
c_{11}, c_{12}	$(u^{20}-u^{19}+\cdots-2u+1)(u^{76}+13u^{74}+\cdots-82u+43)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{20} - 4y^{19} + \cdots + 5248y + 256)$ $\cdot (y^{76} - 67y^{75} + \cdots + 4349328y + 2085136)$
c_2	$(y^{20} - 8y^{19} + \cdots - 6y + 1)(y^{76} - 19y^{75} + \cdots - 82030y + 529)$
c_3	$(y^{20} - 11y^{19} + \cdots + 14y + 1)$ $\cdot (y^{76} - 62y^{75} + \cdots - 205858982y + 6932689)$
c_4, c_5, c_8	$(y^{20} - 25y^{19} + \cdots + 8y + 1)(y^{76} - 76y^{75} + \cdots + 52976y + 729)$
c_6	$(y^{20} - 7y^{19} + \cdots - 12y + 1)(y^{76} - 18y^{75} + \cdots - 15152y + 361)$
c_7, c_{11}, c_{12}	$(y^{20} + 13y^{19} + \cdots + 16y + 1)(y^{76} + 26y^{75} + \cdots + 34556y + 1849)$
c_9	$(y^{20} + 6y^{19} + \cdots + 3y + 1)(y^{76} + 15y^{75} + \cdots + 88335y + 5041)$
c_{10}	$(y^{20} + 4y^{19} + \cdots - 97y + 121)$ $\cdot (y^{76} + 13y^{75} + \cdots + 10810607y + 199809)$