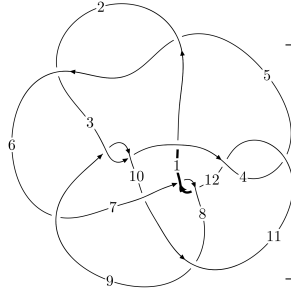
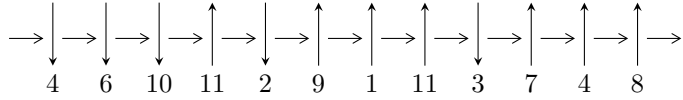


12n₀₈₀₂ (K12n₀₈₀₂)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 8.33978 \times 10^{205} u^{76} - 1.08961 \times 10^{205} u^{75} + \dots + 1.57363 \times 10^{205} b + 1.04860 \times 10^{208}, \\ 3.39045 \times 10^{208} u^{76} - 4.06453 \times 10^{207} u^{75} + \dots + 2.18734 \times 10^{207} a + 4.26481 \times 10^{210}, \\ u^{77} + u^{76} + \dots + 792u + 139 \rangle$$

$$I_2^u = \langle 91110u^{16} + 162998u^{15} + \dots + 502439b + 111491, \\ 283556u^{16} + 222982u^{15} + \dots + 502439a - 280909, u^{17} - 4u^{15} + \dots + 4u^2 - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 94 representations.

¹The 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>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\mathbf{I. } I_1^u = \langle 8.34 \times 10^{205} u^{76} - 1.09 \times 10^{205} u^{75} + \dots + 1.57 \times 10^{205} b + 1.05 \times 10^{208}, 3.39 \times 10^{208} u^{76} - 4.06 \times 10^{207} u^{75} + \dots + 2.19 \times 10^{207} a + 4.26 \times 10^{210}, u^{77} + u^{76} + \dots + 792u + 139 \rangle$$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_4 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -15.5003u^{76} + 1.85821u^{75} + \dots - 9371.39u - 1949.77 \\ -5.29972u^{76} + 0.692419u^{75} + \dots - 3206.91u - 666.357 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 61.0416u^{76} - 7.07935u^{75} + \dots + 36598.3u + 7624.22 \\ 4.27107u^{76} - 0.504359u^{75} + \dots + 2580.72u + 538.356 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -10.2006u^{76} + 1.16579u^{75} + \dots - 6164.48u - 1283.41 \\ -5.29972u^{76} + 0.692419u^{75} + \dots - 3206.91u - 666.357 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -49.9370u^{76} + 5.72890u^{75} + \dots - 29859.0u - 6221.64 \\ -5.17170u^{76} + 0.559340u^{75} + \dots - 3087.83u - 643.065 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -41.2329u^{76} + 4.69186u^{75} + \dots - 24646.3u - 5135.91 \\ -3.01842u^{76} + 0.279790u^{75} + \dots - 1795.45u - 374.782 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 179.435u^{76} - 20.5873u^{75} + \dots + 107397.u + 22372.5 \\ 3.50440u^{76} - 0.359571u^{75} + \dots + 2115.00u + 440.893 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 7.90952u^{76} - 0.847855u^{75} + \dots + 4713.19u + 984.820 \\ -1.30653u^{76} + 0.126108u^{75} + \dots - 789.550u - 164.686 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -47.9834u^{76} + 5.56443u^{75} + \dots - 28785.0u - 5997.46 \\ -1.04849u^{76} + 0.133040u^{75} + \dots - 667.193u - 139.440 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-871.265u^{76} + 100.233u^{75} + \dots - 521451.u - 108615.$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{77} - 8u^{76} + \dots + 32311988u + 2239897$
c_2, c_5	$u^{77} + u^{76} + \dots - 40176u - 5643$
c_3, c_9	$u^{77} + u^{76} + \dots + 792u + 139$
c_4, c_{11}	$u^{77} - 2u^{76} + \dots + 4508u - 1129$
c_6	$u^{77} + 3u^{76} + \dots - 2292u - 319$
c_7, c_{12}	$u^{77} - u^{76} + \dots - 37u - 11$
c_8	$u^{77} + 6u^{76} + \dots + 195u - 19$
c_{10}	$u^{77} - u^{76} + \dots - 15u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{77} + 44y^{76} + \dots + 727248075963258y - 5017138570609$
c_2, c_5	$y^{77} - 63y^{76} + \dots + 793460772y - 31843449$
c_3, c_9	$y^{77} - 51y^{76} + \dots + 189414y - 19321$
c_4, c_{11}	$y^{77} - 66y^{76} + \dots + 58868382y - 1274641$
c_6	$y^{77} + 23y^{76} + \dots - 2243236y - 101761$
c_7, c_{12}	$y^{77} + 25y^{76} + \dots - 2041y - 121$
c_8	$y^{77} - 108y^{76} + \dots + 382001y - 361$
c_{10}	$y^{77} - 19y^{76} + \dots - 25y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.758997 + 0.616342I$ $a = 1.46817 - 0.34902I$ $b = 0.79967 - 1.26583I$	$1.32991 - 1.97035I$	0
$u = -0.758997 - 0.616342I$ $a = 1.46817 + 0.34902I$ $b = 0.79967 + 1.26583I$	$1.32991 + 1.97035I$	0
$u = 0.911703$ $a = 1.42882$ $b = 2.17200$	3.05365	0
$u = -0.010819 + 1.090530I$ $a = 0.191191 - 0.124778I$ $b = 0.734597 + 0.849848I$	$4.01664 + 4.54282I$	0
$u = -0.010819 - 1.090530I$ $a = 0.191191 + 0.124778I$ $b = 0.734597 - 0.849848I$	$4.01664 - 4.54282I$	0
$u = -1.065640 + 0.254276I$ $a = 0.480002 - 1.159030I$ $b = -0.292883 - 0.664587I$	$-1.91191 + 1.13599I$	0
$u = -1.065640 - 0.254276I$ $a = 0.480002 + 1.159030I$ $b = -0.292883 + 0.664587I$	$-1.91191 - 1.13599I$	0
$u = -1.11487$ $a = -2.43271$ $b = 0.374887$	-3.74100	0
$u = -1.116270 + 0.007414I$ $a = -0.620793 - 0.148394I$ $b = 1.005310 - 0.198862I$	$-3.83080 + 0.35334I$	0
$u = -1.116270 - 0.007414I$ $a = -0.620793 + 0.148394I$ $b = 1.005310 + 0.198862I$	$-3.83080 - 0.35334I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.695591 + 0.874541I$ $a = -0.104081 - 0.102779I$ $b = -0.528202 - 0.116523I$	$-0.95380 + 2.56825I$	0
$u = -0.695591 - 0.874541I$ $a = -0.104081 + 0.102779I$ $b = -0.528202 + 0.116523I$	$-0.95380 - 2.56825I$	0
$u = -1.119770 + 0.088439I$ $a = -1.30975 + 1.24365I$ $b = -2.25028 + 1.34716I$	$-0.31477 + 6.50480I$	0
$u = -1.119770 - 0.088439I$ $a = -1.30975 - 1.24365I$ $b = -2.25028 - 1.34716I$	$-0.31477 - 6.50480I$	0
$u = 1.103770 + 0.223227I$ $a = 0.322545 + 0.190472I$ $b = -0.960347 + 0.441859I$	$-6.03076 - 3.62911I$	0
$u = 1.103770 - 0.223227I$ $a = 0.322545 - 0.190472I$ $b = -0.960347 - 0.441859I$	$-6.03076 + 3.62911I$	0
$u = 1.035260 + 0.465565I$ $a = -1.16999 - 1.22271I$ $b = -0.62849 - 1.67436I$	$0.58777 - 4.71952I$	0
$u = 1.035260 - 0.465565I$ $a = -1.16999 + 1.22271I$ $b = -0.62849 + 1.67436I$	$0.58777 + 4.71952I$	0
$u = 0.217467 + 0.833274I$ $a = 0.204278 - 0.401189I$ $b = -1.035260 - 0.397841I$	$5.89269 + 5.41568I$	0
$u = 0.217467 - 0.833274I$ $a = 0.204278 + 0.401189I$ $b = -1.035260 + 0.397841I$	$5.89269 - 5.41568I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.091030 + 0.347422I$ $a = -0.11223 - 1.63823I$ $b = 0.494694 - 1.137330I$	$-1.10617 - 4.08847I$	0
$u = 1.091030 - 0.347422I$ $a = -0.11223 + 1.63823I$ $b = 0.494694 + 1.137330I$	$-1.10617 + 4.08847I$	0
$u = -1.116810 + 0.335012I$ $a = 0.40003 + 1.95228I$ $b = 0.565199 + 0.678583I$	$3.30736 + 2.92566I$	0
$u = -1.116810 - 0.335012I$ $a = 0.40003 - 1.95228I$ $b = 0.565199 - 0.678583I$	$3.30736 - 2.92566I$	0
$u = 1.181340 + 0.003850I$ $a = -0.92722 + 1.76444I$ $b = -0.134594 + 1.072470I$	$-7.66719 - 1.85639I$	0
$u = 1.181340 - 0.003850I$ $a = -0.92722 - 1.76444I$ $b = -0.134594 - 1.072470I$	$-7.66719 + 1.85639I$	0
$u = -1.183980 + 0.202308I$ $a = 0.82439 - 1.52658I$ $b = -0.452462 - 0.812176I$	$-1.38098 + 1.72001I$	0
$u = -1.183980 - 0.202308I$ $a = 0.82439 + 1.52658I$ $b = -0.452462 + 0.812176I$	$-1.38098 - 1.72001I$	0
$u = 0.787886 + 0.099348I$ $a = 1.52773 - 2.14738I$ $b = 1.01856 - 1.19509I$	$3.17288 - 1.22575I$	0
$u = 0.787886 - 0.099348I$ $a = 1.52773 + 2.14738I$ $b = 1.01856 + 1.19509I$	$3.17288 + 1.22575I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.000804 + 1.208190I$ $a = 0.216880 + 0.347898I$ $b = 0.225684 - 0.704296I$	$-3.05027 - 0.94756I$	0
$u = 0.000804 - 1.208190I$ $a = 0.216880 - 0.347898I$ $b = 0.225684 + 0.704296I$	$-3.05027 + 0.94756I$	0
$u = 0.133250 + 1.220520I$ $a = -0.131494 - 0.101763I$ $b = -0.694787 + 0.844760I$	$2.85374 - 11.06360I$	0
$u = 0.133250 - 1.220520I$ $a = -0.131494 + 0.101763I$ $b = -0.694787 - 0.844760I$	$2.85374 + 11.06360I$	0
$u = -0.722758 + 0.238117I$ $a = -1.75262 + 2.18724I$ $b = -0.21833 + 1.90963I$	$1.55815 + 6.08582I$	0
$u = -0.722758 - 0.238117I$ $a = -1.75262 - 2.18724I$ $b = -0.21833 - 1.90963I$	$1.55815 - 6.08582I$	0
$u = 0.755834$ $a = 1.17517$ $b = 1.75003$	3.09798	-4.83340
$u = 1.172280 + 0.417636I$ $a = -0.17453 + 1.80364I$ $b = -0.661781 + 0.694578I$	$2.92989 - 9.94785I$	0
$u = 1.172280 - 0.417636I$ $a = -0.17453 - 1.80364I$ $b = -0.661781 - 0.694578I$	$2.92989 + 9.94785I$	0
$u = 1.272770 + 0.184016I$ $a = -0.65660 - 1.47391I$ $b = 0.651251 - 0.990914I$	$-3.05844 - 8.07962I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.272770 - 0.184016I$ $a = -0.65660 + 1.47391I$ $b = 0.651251 + 0.990914I$	$-3.05844 + 8.07962I$	0
$u = -0.290588 + 0.637778I$ $a = -0.311030 - 0.501017I$ $b = 1.131460 - 0.351988I$	$5.82765 + 0.77594I$	$5.84300 - 2.67611I$
$u = -0.290588 - 0.637778I$ $a = -0.311030 + 0.501017I$ $b = 1.131460 + 0.351988I$	$5.82765 - 0.77594I$	$5.84300 + 2.67611I$
$u = 1.300670 + 0.104807I$ $a = 0.145206 - 1.109260I$ $b = -0.578994 - 0.801863I$	$-6.47566 - 2.58505I$	0
$u = 1.300670 - 0.104807I$ $a = 0.145206 + 1.109260I$ $b = -0.578994 + 0.801863I$	$-6.47566 + 2.58505I$	0
$u = -0.638923 + 0.237400I$ $a = 1.92039 - 0.14693I$ $b = -0.213109 - 0.365332I$	$-2.17556 + 0.65395I$	$-9.20343 - 5.27465I$
$u = -0.638923 - 0.237400I$ $a = 1.92039 + 0.14693I$ $b = -0.213109 + 0.365332I$	$-2.17556 - 0.65395I$	$-9.20343 + 5.27465I$
$u = -1.291130 + 0.352756I$ $a = -0.02607 - 1.87165I$ $b = -0.88563 - 1.75280I$	$-8.67471 + 6.59602I$	0
$u = -1.291130 - 0.352756I$ $a = -0.02607 + 1.87165I$ $b = -0.88563 + 1.75280I$	$-8.67471 - 6.59602I$	0
$u = 0.330805 + 0.513963I$ $a = 0.447914 - 0.085197I$ $b = 0.633023 + 0.390219I$	$1.170010 + 0.511271I$	$7.93499 - 2.10183I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.330805 - 0.513963I$ $a = 0.447914 + 0.085197I$ $b = 0.633023 - 0.390219I$	$1.170010 - 0.511271I$	$7.93499 + 2.10183I$
$u = 0.246079 + 0.526147I$ $a = 1.57072 + 0.38139I$ $b = -0.025841 + 1.081900I$	$2.60807 + 0.74898I$	$3.51716 - 0.31657I$
$u = 0.246079 - 0.526147I$ $a = 1.57072 - 0.38139I$ $b = -0.025841 - 1.081900I$	$2.60807 - 0.74898I$	$3.51716 + 0.31657I$
$u = 1.35457 + 0.52174I$ $a = -0.01207 - 1.55989I$ $b = 1.02876 - 1.43648I$	$-0.26091 - 10.21520I$	0
$u = 1.35457 - 0.52174I$ $a = -0.01207 + 1.55989I$ $b = 1.02876 + 1.43648I$	$-0.26091 + 10.21520I$	0
$u = 0.080850 + 0.537512I$ $a = -0.331378 - 0.654699I$ $b = -0.707167 + 0.980733I$	$-4.48701 - 3.03669I$	$5.16104 + 7.39684I$
$u = 0.080850 - 0.537512I$ $a = -0.331378 + 0.654699I$ $b = -0.707167 - 0.980733I$	$-4.48701 + 3.03669I$	$5.16104 - 7.39684I$
$u = 1.40085 + 0.40250I$ $a = -0.016309 + 1.193430I$ $b = -1.04169 + 1.29261I$	$-8.68571 - 4.73560I$	0
$u = 1.40085 - 0.40250I$ $a = -0.016309 - 1.193430I$ $b = -1.04169 - 1.29261I$	$-8.68571 + 4.73560I$	0
$u = -1.39036 + 0.57949I$ $a = -0.159041 + 1.141650I$ $b = 0.77534 + 1.38516I$	$-7.31609 + 7.24715I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.39036 - 0.57949I$ $a = -0.159041 - 1.141650I$ $b = 0.77534 - 1.38516I$	$-7.31609 - 7.24715I$	0
$u = -0.394801 + 0.288987I$ $a = -2.66235 + 1.07859I$ $b = -0.152342 + 1.354640I$	$1.61463 + 6.08143I$	$1.65363 - 3.54096I$
$u = -0.394801 - 0.288987I$ $a = -2.66235 - 1.07859I$ $b = -0.152342 - 1.354640I$	$1.61463 - 6.08143I$	$1.65363 + 3.54096I$
$u = -1.42831 + 0.53758I$ $a = -0.03870 - 1.46221I$ $b = -1.09850 - 1.41506I$	$-2.0258 + 17.1703I$	0
$u = -1.42831 - 0.53758I$ $a = -0.03870 + 1.46221I$ $b = -1.09850 + 1.41506I$	$-2.0258 - 17.1703I$	0
$u = 1.46502 + 0.49693I$ $a = 0.037413 + 1.171880I$ $b = -0.853847 + 1.061410I$	$-7.05974 - 8.63532I$	0
$u = 1.46502 - 0.49693I$ $a = 0.037413 - 1.171880I$ $b = -0.853847 - 1.061410I$	$-7.05974 + 8.63532I$	0
$u = -1.50322 + 0.49069I$ $a = 0.006370 + 1.080770I$ $b = 0.677127 + 1.140250I$	$-7.01071 + 4.87145I$	0
$u = -1.50322 - 0.49069I$ $a = 0.006370 - 1.080770I$ $b = 0.677127 - 1.140250I$	$-7.01071 - 4.87145I$	0
$u = -0.210525 + 0.311466I$ $a = 2.18028 + 1.43772I$ $b = -0.206538 + 0.269662I$	$-1.90333 + 0.92139I$	$-5.44582 + 1.92407I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.210525 - 0.311466I$ $a = 2.18028 - 1.43772I$ $b = -0.206538 - 0.269662I$	$-1.90333 - 0.92139I$	$-5.44582 - 1.92407I$
$u = -1.70360 + 0.29340I$ $a = 0.021683 - 0.365141I$ $b = -0.406453 - 0.522497I$	$-0.79210 + 1.62218I$	0
$u = -1.70360 - 0.29340I$ $a = 0.021683 + 0.365141I$ $b = -0.406453 + 0.522497I$	$-0.79210 - 1.62218I$	0
$u = 1.94427 + 0.25926I$ $a = 0.191630 - 0.307980I$ $b = 0.708436 - 0.462080I$	$-1.70623 + 3.05877I$	0
$u = 1.94427 - 0.25926I$ $a = 0.191630 + 0.307980I$ $b = 0.708436 + 0.462080I$	$-1.70623 - 3.05877I$	0
$u = -0.25319 + 2.28522I$ $a = 0.0183860 + 0.0150818I$ $b = -0.070031 - 0.348268I$	$-1.18900 + 2.18789I$	0
$u = -0.25319 - 2.28522I$ $a = 0.0183860 - 0.0150818I$ $b = -0.070031 + 0.348268I$	$-1.18900 - 2.18789I$	0

II. $I_2^u = \langle 9.11 \times 10^4 u^{16} + 1.63 \times 10^5 u^{15} + \dots + 5.02 \times 10^5 b + 1.11 \times 10^5, 2.84 \times 10^5 u^{16} + 2.23 \times 10^5 u^{15} + \dots + 5.02 \times 10^5 a - 2.81 \times 10^5, u^{17} - 4u^{15} + \dots + 4u^2 - 1 \rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_4 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.564359u^{16} - 0.443799u^{15} + \dots + 0.499613u + 0.559091 \\ -0.181335u^{16} - 0.324414u^{15} + \dots + 1.71782u - 0.221900 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.523656u^{16} + 1.25267u^{15} + \dots - 0.706948u + 0.869208 \\ -0.166132u^{16} + 0.102498u^{15} + \dots - 2.58379u - 1.39833 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.383024u^{16} - 0.119386u^{15} + \dots - 1.21821u + 0.780990 \\ -0.181335u^{16} - 0.324414u^{15} + \dots + 1.71782u - 0.221900 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.166693u^{16} - 0.255010u^{15} + \dots + 0.0329612u - 2.12171 \\ -1.18134u^{16} - 0.324414u^{15} + \dots - 1.28218u - 0.221900 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.979729u^{16} - 0.559953u^{15} + \dots - 1.43071u - 3.07725 \\ -0.565850u^{16} - 0.255541u^{15} + \dots - 0.964933u + 0.428689 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -2.22373u^{16} - 2.33836u^{15} + \dots - 2.59451u - 3.02392 \\ 0.499460u^{16} + 0.149873u^{15} + \dots + 3.16482u + 0.900376 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.552909u^{16} - 0.722456u^{15} + \dots - 2.87988u + 1.54459 \\ 0.787403u^{16} + 0.296938u^{15} + \dots + 5.41888u + 0.897773 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.404270u^{16} + 1.13515u^{15} + \dots - 1.48794u + 0.252232 \\ -0.0162587u^{16} + 0.0532403u^{15} + \dots - 1.68341u - 0.898869 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $\frac{7310202}{502439}u^{16} + \frac{3456735}{502439}u^{15} + \dots + \frac{15933523}{502439}u + \frac{5895545}{502439}$

(iv) u -Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} + 3u^{16} + \dots - 94u + 31$
c_2	$u^{17} + 6u^{16} + \dots + 12u + 5$
c_3	$u^{17} - 4u^{15} + \dots - 4u^2 + 1$
c_4	$u^{17} + u^{16} + \dots + 6u - 1$
c_5	$u^{17} - 6u^{16} + \dots + 12u - 5$
c_6	$u^{17} + 3u^{15} + \dots - 2u - 1$
c_7	$u^{17} - 2u^{16} + \dots + u - 1$
c_8	$u^{17} + 7u^{16} + \dots + 221u + 23$
c_9	$u^{17} - 4u^{15} + \dots + 4u^2 - 1$
c_{10}	$u^{17} - 8u^{15} + \dots - u + 1$
c_{11}	$u^{17} - u^{16} + \dots + 6u + 1$
c_{12}	$u^{17} + 2u^{16} + \dots + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 5y^{16} + \dots - 11376y - 961$
c_2, c_5	$y^{17} - 28y^{16} + \dots - 6y - 25$
c_3, c_9	$y^{17} - 8y^{16} + \dots + 8y - 1$
c_4, c_{11}	$y^{17} - 7y^{16} + \dots + 24y - 1$
c_6	$y^{17} + 6y^{16} + \dots - 14y - 1$
c_7, c_{12}	$y^{17} + 12y^{16} + \dots - 3y - 1$
c_8	$y^{17} - 5y^{16} + \dots + 20459y - 529$
c_{10}	$y^{17} - 16y^{16} + \dots - 43y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.10570$ $a = 2.70999$ $b = -0.375089$	-3.71205	178.710
$u = -0.852456 + 0.254240I$ $a = -2.20438 + 2.03152I$ $b = -1.12246 + 1.74335I$	$1.30681 + 6.74725I$	$1.14602 - 11.82219I$
$u = -0.852456 - 0.254240I$ $a = -2.20438 - 2.03152I$ $b = -1.12246 - 1.74335I$	$1.30681 - 6.74725I$	$1.14602 + 11.82219I$
$u = -1.231690 + 0.050913I$ $a = -0.72795 - 1.70057I$ $b = 0.078174 - 1.030070I$	$-8.23055 + 2.35568I$	$-10.79846 - 4.11130I$
$u = -1.231690 - 0.050913I$ $a = -0.72795 + 1.70057I$ $b = 0.078174 + 1.030070I$	$-8.23055 - 2.35568I$	$-10.79846 + 4.11130I$
$u = 0.566286 + 0.419821I$ $a = -1.35242 + 0.75569I$ $b = 0.441137 - 0.361394I$	$-1.78451 + 0.00683I$	$1.85797 - 0.92831I$
$u = 0.566286 - 0.419821I$ $a = -1.35242 - 0.75569I$ $b = 0.441137 + 0.361394I$	$-1.78451 - 0.00683I$	$1.85797 + 0.92831I$
$u = 0.650959 + 0.103366I$ $a = 1.89640 + 0.91449I$ $b = 1.58700 + 0.40196I$	$3.63746 + 0.25672I$	$8.91479 - 1.78095I$
$u = 0.650959 - 0.103366I$ $a = 1.89640 - 0.91449I$ $b = 1.58700 - 0.40196I$	$3.63746 - 0.25672I$	$8.91479 + 1.78095I$
$u = 1.38326 + 0.38646I$ $a = -0.01656 + 1.52358I$ $b = -0.91943 + 1.58402I$	$-10.21830 - 6.17160I$	$-7.90077 + 4.40861I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.38326 - 0.38646I$		
$a = -0.01656 - 1.52358I$	$-10.21830 + 6.17160I$	$-7.90077 - 4.40861I$
$b = -0.91943 - 1.58402I$		
$u = -0.257593 + 0.330900I$		
$a = 0.74632 + 1.36587I$	$-4.88208 + 2.61023I$	$-4.10985 + 1.67367I$
$b = -0.727112 - 0.859807I$		
$u = -0.257593 - 0.330900I$		
$a = 0.74632 - 1.36587I$	$-4.88208 - 2.61023I$	$-4.10985 - 1.67367I$
$b = -0.727112 + 0.859807I$		
$u = -1.47823 + 0.58873I$		
$a = -0.098328 + 0.971018I$	$-8.08979 + 6.54241I$	$-6.90566 - 5.03669I$
$b = 0.766035 + 1.140450I$		
$u = -1.47823 - 0.58873I$		
$a = -0.098328 - 0.971018I$	$-8.08979 - 6.54241I$	$-6.90566 + 5.03669I$
$b = 0.766035 - 1.140450I$		
$u = 0.66660 + 1.83006I$		
$a = -0.0980715 + 0.0837570I$	$-1.13677 - 2.14375I$	$11.4391 - 38.8291I$
$b = 0.084203 - 0.275603I$		
$u = 0.66660 - 1.83006I$		
$a = -0.0980715 - 0.0837570I$	$-1.13677 + 2.14375I$	$11.4391 + 38.8291I$
$b = 0.084203 + 0.275603I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17} + 3u^{16} + \dots - 94u + 31) \cdot (u^{77} - 8u^{76} + \dots + 32311988u + 2239897)$
c_2	$(u^{17} + 6u^{16} + \dots + 12u + 5)(u^{77} + u^{76} + \dots - 40176u - 5643)$
c_3	$(u^{17} - 4u^{15} + \dots - 4u^2 + 1)(u^{77} + u^{76} + \dots + 792u + 139)$
c_4	$(u^{17} + u^{16} + \dots + 6u - 1)(u^{77} - 2u^{76} + \dots + 4508u - 1129)$
c_5	$(u^{17} - 6u^{16} + \dots + 12u - 5)(u^{77} + u^{76} + \dots - 40176u - 5643)$
c_6	$(u^{17} + 3u^{15} + \dots - 2u - 1)(u^{77} + 3u^{76} + \dots - 2292u - 319)$
c_7	$(u^{17} - 2u^{16} + \dots + u - 1)(u^{77} - u^{76} + \dots - 37u - 11)$
c_8	$(u^{17} + 7u^{16} + \dots + 221u + 23)(u^{77} + 6u^{76} + \dots + 195u - 19)$
c_9	$(u^{17} - 4u^{15} + \dots + 4u^2 - 1)(u^{77} + u^{76} + \dots + 792u + 139)$
c_{10}	$(u^{17} - 8u^{15} + \dots - u + 1)(u^{77} - u^{76} + \dots - 15u - 1)$
c_{11}	$(u^{17} - u^{16} + \dots + 6u + 1)(u^{77} - 2u^{76} + \dots + 4508u - 1129)$
c_{12}	$(u^{17} + 2u^{16} + \dots + u + 1)(u^{77} - u^{76} + \dots - 37u - 11)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 5y^{16} + \dots - 11376y - 961)$ $\cdot (y^{77} + 44y^{76} + \dots + 727248075963258y - 5017138570609)$
c_2, c_5	$(y^{17} - 28y^{16} + \dots - 6y - 25)$ $\cdot (y^{77} - 63y^{76} + \dots + 793460772y - 31843449)$
c_3, c_9	$(y^{17} - 8y^{16} + \dots + 8y - 1)(y^{77} - 51y^{76} + \dots + 189414y - 19321)$
c_4, c_{11}	$(y^{17} - 7y^{16} + \dots + 24y - 1)$ $\cdot (y^{77} - 66y^{76} + \dots + 58868382y - 1274641)$
c_6	$(y^{17} + 6y^{16} + \dots - 14y - 1)(y^{77} + 23y^{76} + \dots - 2243236y - 101761)$
c_7, c_{12}	$(y^{17} + 12y^{16} + \dots - 3y - 1)(y^{77} + 25y^{76} + \dots - 2041y - 121)$
c_8	$(y^{17} - 5y^{16} + \dots + 20459y - 529)$ $\cdot (y^{77} - 108y^{76} + \dots + 382001y - 361)$
c_{10}	$(y^{17} - 16y^{16} + \dots - 43y - 1)(y^{77} - 19y^{76} + \dots - 25y - 1)$