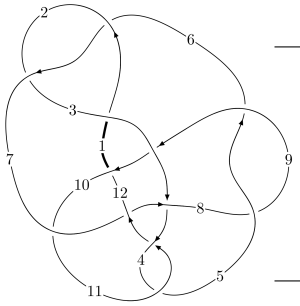
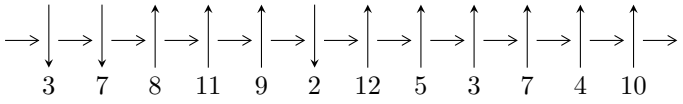
$12n_{0606}$ $(K12n_{0606})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.60434 \times 10^{191} u^{60} + 3.06370 \times 10^{190} u^{59} + \cdots + 9.90808 \times 10^{192} b - 1.81924 \times 10^{193},$$
$$1.45667 \times 10^{192} u^{60} - 2.33309 \times 10^{192} u^{59} + \cdots + 1.98162 \times 10^{193} a + 2.73135 \times 10^{192},\ u^{61} - u^{60} + \cdots + 58u$$
$$I_2^u = \langle 6183716894369 u^{21} + 1374457475661 u^{20} + \cdots + 20376431428799 b - 1818725790068,$$
$$23344139331015 u^{21} + 15115284063805 u^{20} + \cdots + 40752862857598 a + 81671293633640,$$
$$u^{22} + u^{20} + \cdots + 7u^2 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 83 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. $\boldsymbol{I_1^u = \langle -1.60 \times 10^{191} u^{60} + 3.06 \times 10^{190} u^{59} + \cdots + 9.91 \times 10^{192} b - 1.82 \times 10^{193},\ 1.46 \times 10^{192} u^{60} - 2.33 \times 10^{192} u^{59} + \cdots + 1.98 \times 10^{193} a + 2.73 \times 10^{192},\ u^{61} - u^{60} + \cdots + 58u + 25 \rangle}$

(i) Arc colorings

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

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

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

$$a_{12} = \begin{pmatrix} -0.0735091u^{60} + 0.117737u^{59} + \cdots - 2.04132u - 0.137835 \\ 0.0161923u^{60} - 0.00309212u^{59} + \cdots + 4.89491u + 1.83612 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.139781u^{60} - 0.129132u^{59} + \cdots + 15.7191u + 4.33924 \\ -0.00116829u^{60} + 0.0144033u^{59} + \cdots + 1.86244u + 0.197937 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0704268u^{60} - 0.0732087u^{59} + \cdots + 2.42540u + 0.360156 \\ 0.0813783u^{60} - 0.0764120u^{59} + \cdots + 12.8465u + 2.33043 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.178777u^{60} - 0.179760u^{59} + \cdots + 16.8712u + 2.62104 \\ 0.0511130u^{60} - 0.0380784u^{59} + \cdots + 10.0334u + 2.28547 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.103262u^{60} - 0.0386507u^{59} + \cdots + 17.0502u + 9.16938 \\ -0.172371u^{60} + 0.154684u^{59} + \cdots - 24.1023u - 5.29676 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0897013u^{60} + 0.120829u^{59} + \cdots - 6.93623u - 1.97395 \\ 0.0161923u^{60} - 0.00309212u^{59} + \cdots + 4.89491u + 1.83612 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0660658u^{60} - 0.0890977u^{59} + \cdots + 6.16157u - 0.139445 \\ -0.0739833u^{60} + 0.0958469u^{59} + \cdots - 5.82769u + 1.54267 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.0689463u^{60} + 0.140243u^{59} + \cdots - 1.52496u + 4.30676 \\ 0.0119356u^{60} - 0.0639002u^{59} + \cdots - 6.32232u - 5.61607 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0431325u^{60} + 0.0739412u^{59} + \cdots - 5.43574u + 0.473106 \\ 0.0113729u^{60} - 0.0535091u^{59} + \cdots - 4.61936u - 4.60387 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.625154u^{60} - 0.710423u^{59} + \cdots + 55.0401u + 12.7589$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{61} + 80u^{60} + \cdots + 86779u + 2401$
c_2, c_6	$u^{61} - 2u^{60} + \cdots + 441u - 49$
c_3	$u^{61} + u^{60} + \cdots + 58u - 25$
c_4, c_{11}	$u^{61} - 2u^{60} + \cdots - 33u - 19$
c_5, c_8	$u^{61} - 2u^{60} + \cdots + 261u - 29$
c_7	$u^{61} + 2u^{60} + \cdots - 276u - 333$
c_9	$u^{61} - 2u^{60} + \cdots + 96105u - 40873$
c_{10}	$u^{61} + 2u^{60} + \cdots - 3730060u - 1063025$
c_{12}	$u^{61} + u^{60} + \cdots + 24262u - 3637$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{61} - 188y^{60} + \cdots - 978957329y - 5764801$
c_2, c_6	$y^{61} - 80y^{60} + \cdots + 86779y - 2401$
c_3	$y^{61} + 9y^{60} + \cdots - 4186y - 625$
c_4, c_{11}	$y^{61} + 42y^{60} + \cdots + 367y - 361$
c_5, c_8	$y^{61} - 24y^{60} + \cdots + 17197y - 841$
c_7	$y^{61} + 24y^{60} + \cdots - 3453624y - 110889$
c_9	$y^{61} + 106y^{60} + \cdots - 28850843549y - 1670602129$
c_{10}	$y^{61} + 50y^{60} + \cdots + 4847404798650y - 1130022150625$
c_{12}	$y^{61} + 83y^{60} + \cdots - 463357606y - 13227769$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.910345+0.431030I$ $a=\ \ 0.083295-0.454008I$ $b=\ \ 0.591145+0.176936I$	$2.26261-0.47311I$	$6.00000+0.82328I$
$u=-0.910345-0.431030I$ $a=\ \ 0.083295+0.454008I$ $b=\ \ 0.591145-0.176936I$	$2.26261+0.47311I$	$6.00000-0.82328I$
$u=-0.905896+0.155656I$ $a=-0.855256+0.495486I$ $b=-0.471322+0.022876I$	$1.384080-0.049647I$	$8.60374+0.34198I$
$u=-0.905896-0.155656I$ $a=-0.855256-0.495486I$ $b=-0.471322-0.022876I$	$1.384080+0.049647I$	$8.60374-0.34198I$
$u=\ \ 0.873224+0.669571I$ $a=\ \ 0.981899+0.270500I$ $b=\ \ 0.849049-0.003724I$	$0.68598+5.02449I$	$6.00000-6.97083I$
$u=\ \ 0.873224-0.669571I$ $a=\ \ 0.981899-0.270500I$ $b=\ \ 0.849049+0.003724I$	$0.68598-5.02449I$	$6.00000+6.97083I$
$u=\ \ 0.796281+0.378338I$ $a=-1.116940-0.754299I$ $b=-0.339467-1.155790I$	$-2.21988+2.71821I$	$2.79760-2.35403I$
$u=\ \ 0.796281-0.378338I$ $a=-1.116940+0.754299I$ $b=-0.339467+1.155790I$	$-2.21988-2.71821I$	$2.79760+2.35403I$
$u=-0.783728+0.810034I$ $a=-1.086800+0.185128I$ $b=-1.269080-0.034183I$	$-8.29039-8.79817I$	$0.+5.94350I$
$u=-0.783728-0.810034I$ $a=-1.086800-0.185128I$ $b=-1.269080+0.034183I$	$-8.29039+8.79817I$	$0.-5.94350I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.100430 + 0.405618I$ $a = 0.564804 - 0.867691I$ $b = 0.668724 - 0.343543I$	$-7.18810 + 2.78232I$	0
$u = 1.100430 - 0.405618I$ $a = 0.564804 + 0.867691I$ $b = 0.668724 + 0.343543I$	$-7.18810 - 2.78232I$	0
$u = 0.902535 + 0.787150I$ $a = 1.38806 + 0.58993I$ $b = 0.077875 + 1.023620I$	$-2.49063 + 3.37367I$	0
$u = 0.902535 - 0.787150I$ $a = 1.38806 - 0.58993I$ $b = 0.077875 - 1.023620I$	$-2.49063 - 3.37367I$	0
$u = -0.143701 + 1.197970I$ $a = -0.758684 - 0.050261I$ $b = -0.81574 - 1.26237I$	$-12.04860 + 3.96320I$	0
$u = -0.143701 - 1.197970I$ $a = -0.758684 + 0.050261I$ $b = -0.81574 + 1.26237I$	$-12.04860 - 3.96320I$	0
$u = -0.737649 + 0.288030I$ $a = -1.22841 + 1.53957I$ $b = 0.141796 + 0.826845I$	$1.16799 + 0.97942I$	$11.64968 - 5.59628I$
$u = -0.737649 - 0.288030I$ $a = -1.22841 - 1.53957I$ $b = 0.141796 - 0.826845I$	$1.16799 - 0.97942I$	$11.64968 + 5.59628I$
$u = 0.409288 + 1.166070I$ $a = -0.968903 + 0.296598I$ $b = -0.873837 - 0.531957I$	$-10.15910 + 2.60373I$	0
$u = 0.409288 - 1.166070I$ $a = -0.968903 - 0.296598I$ $b = -0.873837 + 0.531957I$	$-10.15910 - 2.60373I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.178219+1.234730I$ $a=\ 0.704583+0.086186I$ $b=\ 0.489122-1.159650I$	$-4.94617-1.68496I$	0
$u=-0.178219-1.234730I$ $a=\ 0.704583-0.086186I$ $b=\ 0.489122+1.159650I$	$-4.94617+1.68496I$	0
$u=\ 0.548172+0.498732I$ $a=-0.827761-0.239428I$ $b=-1.175910+0.324455I$	$3.56437+0.65529I$	$6.54598-9.43946I$
$u=\ 0.548172-0.498732I$ $a=-0.827761+0.239428I$ $b=-1.175910-0.324455I$	$3.56437-0.65529I$	$6.54598+9.43946I$
$u=-0.783796+0.998521I$ $a=-1.48491+0.19075I$ $b=-0.301845+1.321410I$	$-15.6806-6.1080I$	0
$u=-0.783796-0.998521I$ $a=-1.48491-0.19075I$ $b=-0.301845-1.321410I$	$-15.6806+6.1080I$	0
$u=-0.514875+0.492130I$ $a=\ 1.59948+2.11483I$ $b=\ 0.398091-1.052590I$	$-9.26345-6.82861I$	$3.46166+7.84368I$
$u=-0.514875-0.492130I$ $a=\ 1.59948-2.11483I$ $b=\ 0.398091+1.052590I$	$-9.26345+6.82861I$	$3.46166-7.84368I$
$u=\ 0.264074+0.645372I$ $a=\ 1.328340+0.443782I$ $b=-0.016093+1.164140I$	$-3.08605-2.29569I$	$1.42347+3.66981I$
$u=\ 0.264074-0.645372I$ $a=\ 1.328340-0.443782I$ $b=-0.016093-1.164140I$	$-3.08605+2.29569I$	$1.42347-3.66981I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.773573 + 1.049630I$ $a = 1.183780 + 0.080595I$ $b = 0.573481 + 1.240910I$	$-4.00356 + 7.17574I$	0
$u = 0.773573 - 1.049630I$ $a = 1.183780 - 0.080595I$ $b = 0.573481 - 1.240910I$	$-4.00356 - 7.17574I$	0
$u = -0.338814 + 1.265940I$ $a = -0.521179 + 0.796599I$ $b = 0.139314 - 0.503690I$	$-9.74367 + 3.57994I$	0
$u = -0.338814 - 1.265940I$ $a = -0.521179 - 0.796599I$ $b = 0.139314 + 0.503690I$	$-9.74367 - 3.57994I$	0
$u = -0.308314 + 0.613085I$ $a = 1.345220 + 0.160561I$ $b = 0.935401 + 0.570302I$	$-1.34263 - 1.55470I$	$1.10269 + 5.91362I$
$u = -0.308314 - 0.613085I$ $a = 1.345220 - 0.160561I$ $b = 0.935401 - 0.570302I$	$-1.34263 + 1.55470I$	$1.10269 - 5.91362I$
$u = -0.122393 + 0.642085I$ $a = 1.260040 + 0.577361I$ $b = 0.488074 + 0.349651I$	$-1.49067 - 1.69118I$	$1.10870 + 3.00446I$
$u = -0.122393 - 0.642085I$ $a = 1.260040 - 0.577361I$ $b = 0.488074 - 0.349651I$	$-1.49067 + 1.69118I$	$1.10870 - 3.00446I$
$u = -0.846285 + 1.110770I$ $a = -0.848090 + 0.034436I$ $b = -0.62079 + 1.29122I$	$0.31756 - 6.96705I$	0
$u = -0.846285 - 1.110770I$ $a = -0.848090 - 0.034436I$ $b = -0.62079 - 1.29122I$	$0.31756 + 6.96705I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.203948+0.521772I$ $a=-2.18101-1.13787I$ $b=\ \ 0.195182+0.839910I$	$1.01441+1.12155I$	$11.43554+3.06720I$
$u=-0.203948-0.521772I$ $a=-2.18101+1.13787I$ $b=\ \ 0.195182-0.839910I$	$1.01441-1.12155I$	$11.43554-3.06720I$
$u=-0.075463+0.501572I$ $a=-1.70075+0.64346I$ $b=-0.47776+1.67863I$	$-13.75710+1.91932I$	$-2.60893-4.18261I$
$u=-0.075463-0.501572I$ $a=-1.70075-0.64346I$ $b=-0.47776-1.67863I$	$-13.75710-1.91932I$	$-2.60893+4.18261I$
$u=\ \ 1.20031+0.90858I$ $a=-0.708252-0.230947I$ $b=-0.317542-1.245240I$	$-2.34363+3.20308I$	0
$u=\ \ 1.20031-0.90858I$ $a=-0.708252+0.230947I$ $b=-0.317542+1.245240I$	$-2.34363-3.20308I$	0
$u=-0.441996$ $a=-1.57855$ $b=-0.366410$	0.849580	12.6400
$u=\ \ 0.360834+0.209871I$ $a=-2.67749+1.83256I$ $b=-0.229649-0.967482I$	$-0.79546+2.56100I$	$5.10158-6.10959I$
$u=\ \ 0.360834-0.209871I$ $a=-2.67749-1.83256I$ $b=-0.229649+0.967482I$	$-0.79546-2.56100I$	$5.10158+6.10959I$
$u=-1.62571+0.49135I$ $a=-0.031980+0.495894I$ $b=\ \ 0.09176+1.50621I$	$-13.41560-0.23117I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.62571-0.49135I$ $a=-0.031980-0.495894I$ $b=\ \ 0.09176-1.50621I$	$-13.41560+0.23117I$	0
$u=\ \ 1.10477+1.32184I$ $a=-0.921810-0.135912I$ $b=-0.59623-1.40084I$	$-12.6177+15.2705I$	0
$u=\ \ 1.10477-1.32184I$ $a=-0.921810+0.135912I$ $b=-0.59623+1.40084I$	$-12.6177-15.2705I$	0
$u=-1.21132+1.26115I$ $a=\ \ 0.809022-0.138932I$ $b=\ \ 0.447860-1.318690I$	$-3.42883-9.78730I$	0
$u=-1.21132-1.26115I$ $a=\ \ 0.809022+0.138932I$ $b=\ \ 0.447860+1.318690I$	$-3.42883+9.78730I$	0
$u=\ \ 1.23693+1.30689I$ $a=\ \ 0.413103+0.160610I$ $b=\ \ 0.357957+1.350540I$	$-1.82315+4.26546I$	0
$u=\ \ 1.23693-1.30689I$ $a=\ \ 0.413103-0.160610I$ $b=\ \ 0.357957-1.350540I$	$-1.82315-4.26546I$	0
$u=-0.77616+1.81286I$ $a=\ \ 0.418912-0.019439I$ $b=\ \ 0.057249-1.068760I$	$-4.52908-0.45066I$	0
$u=-0.77616-1.81286I$ $a=\ \ 0.418912+0.019439I$ $b=\ \ 0.057249+1.068760I$	$-4.52908+0.45066I$	0
$u=\ \ 1.61718+1.51372I$ $a=-0.213047-0.314323I$ $b=\ \ 0.186383-1.117350I$	$-11.73450-5.28579I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$1.61718-1.51372I$		
$a=$	$-0.213047+0.314323I$	$-11.73450+5.28579I$	0
$b=$	$0.186383+1.117350I$		

II.

$\boldsymbol{I_2^u = \langle 6.18\times 10^{12}u^{21}+1.37\times 10^{12}u^{20}+\cdots+2.04\times 10^{13}b-1.82\times 10^{12},\ 2.33\times 10^{13}u^{21}+1.51\times 10^{13}u^{20}+\cdots+4.08\times 10^{13}a+8.17\times 10^{13},\ u^{22}+u^{20}+\cdots+7u^2+1\rangle}$

(i) Arc colorings

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

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

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

$$a_{12} = \begin{pmatrix}-0.572822u^{21}-0.370901u^{20}+\cdots-6.42292u-2.00406\\-0.303474u^{21}-0.0674533u^{20}+\cdots-2.11438u+0.0892563\end{pmatrix}$$

$$a_7 = \begin{pmatrix}-0.490404u^{21}+0.544286u^{20}+\cdots+1.63604u+3.54751\\0.450223u^{21}+0.166556u^{20}+\cdots+1.84761u+0.395045\end{pmatrix}$$

$$a_2 = \begin{pmatrix}0.127478u^{21}-0.0969833u^{20}+\cdots-2.82648u-1.83138\\-0.272013u^{21}-0.162826u^{20}+\cdots-3.02486u-0.530692\end{pmatrix}$$

$$a_1 = \begin{pmatrix}-0.160976u^{21}-0.342532u^{20}+\cdots-5.72386u-2.45906\\-0.0738264u^{21}-0.215757u^{20}+\cdots-2.73641u-0.285144\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-0.902443u^{21}+0.369937u^{20}+\cdots-3.12076u+1.80659\\-0.508034u^{21}+0.236676u^{20}+\cdots-2.08651u-0.447991\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.269348u^{21}-0.303448u^{20}+\cdots-4.30854u-2.09332\\-0.303474u^{21}-0.0674533u^{20}+\cdots-2.11438u+0.0892563\end{pmatrix}$$

$$a_5 = \begin{pmatrix}0.224994u^{21}+0.335014u^{20}+\cdots-1.53934u+1.95806\\-0.620039u^{21}+0.115209u^{20}+\cdots-2.49559u-0.110441\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-0.843674u^{21}+0.135737u^{20}+\cdots-1.44434u+0.954289\\0.0771103u^{21}+0.230053u^{20}+\cdots+0.290077u+0.454193\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}-0.798104u^{21}+0.208278u^{20}+\cdots-1.99794u+1.54422\\-0.0334405u^{21}+0.446821u^{20}+\cdots+0.244507u+0.381653\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$= \frac{40525880426923}{40752862857598}u^{21}+\frac{9112819862999}{40752862857598}u^{20}+\cdots-\frac{281490623171531}{40752862857598}u+\frac{94744620113174}{20376431428799}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{22} - 23u^{21} + \cdots - 11u + 1$
c_2	$u^{22} - u^{21} + \cdots + u + 1$
c_3	$u^{22} + u^{20} + \cdots + 7u^2 + 1$
c_4	$u^{22} + u^{21} + \cdots + u + 7$
c_5	$u^{22} - u^{21} + \cdots - 3u + 5$
c_6	$u^{22} + u^{21} + \cdots - u + 1$
c_7	$u^{22} + u^{21} + \cdots - 4u + 1$
c_8	$u^{22} + u^{21} + \cdots + 3u + 5$
c_9	$u^{22} - u^{21} + \cdots + u + 1$
c_{10}	$u^{22} + u^{21} + \cdots - 10u + 1$
c_{11}	$u^{22} - u^{21} + \cdots - u + 7$
c_{12}	$u^{22} + 6u^{20} + \cdots - 5u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{22} - 39y^{21} + \cdots - 3y + 1$
c_2, c_6	$y^{22} - 23y^{21} + \cdots - 11y + 1$
c_3	$y^{22} + 2y^{21} + \cdots + 14y + 1$
c_4, c_{11}	$y^{22} + 15y^{21} + \cdots + 377y + 49$
c_5, c_8	$y^{22} - 19y^{21} + \cdots - 289y + 25$
c_7	$y^{22} + 9y^{21} + \cdots - 4y + 1$
c_9	$y^{22} + 15y^{21} + \cdots + 21y + 1$
c_{10}	$y^{22} + 15y^{21} + \cdots + 38y + 1$
c_{12}	$y^{22} + 12y^{21} + \cdots - 10y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.749223 + 0.536697I$ $a = -1.93401 - 0.91661I$ $b = -0.274538 - 0.968002I$	$-1.82723 + 4.27576I$	$7.30430 - 9.72989I$
$u = \quad 0.749223 - 0.536697I$ $a = -1.93401 + 0.91661I$ $b = -0.274538 + 0.968002I$	$-1.82723 - 4.27576I$	$7.30430 + 9.72989I$
$u = -1.044190 + 0.356102I$ $a = -0.001977 - 0.673618I$ $b = \quad 0.26050 - 1.56100I$	$-12.82310 + 1.58068I$	$4.83519 - 2.88611I$
$u = -1.044190 - 0.356102I$ $a = -0.001977 + 0.673618I$ $b = \quad 0.26050 + 1.56100I$	$-12.82310 - 1.58068I$	$4.83519 + 2.88611I$
$u = \quad 0.724340 + 0.845777I$ $a = -0.821898 - 0.205533I$ $b = -0.988487 + 0.528451I$	$1.66671 + 2.20771I$	$4.34569 - 3.65314I$
$u = \quad 0.724340 - 0.845777I$ $a = -0.821898 + 0.205533I$ $b = -0.988487 - 0.528451I$	$1.66671 - 2.20771I$	$4.34569 + 3.65314I$
$u = -1.046380 + 0.423272I$ $a = -0.356014 + 1.178150I$ $b = \quad 0.173677 + 0.903500I$	$0.651107 + 0.405045I$	$1.85611 + 1.13547I$
$u = -1.046380 - 0.423272I$ $a = -0.356014 - 1.178150I$ $b = \quad 0.173677 - 0.903500I$	$0.651107 - 0.405045I$	$1.85611 - 1.13547I$
$u = \quad 0.558979 + 1.026050I$ $a = -0.045467 + 0.826842I$ $b = \quad 0.431345 - 0.856577I$	$-9.94231 - 5.09085I$	$2.90449 + 4.36039I$
$u = \quad 0.558979 - 1.026050I$ $a = -0.045467 - 0.826842I$ $b = \quad 0.431345 + 0.856577I$	$-9.94231 + 5.09085I$	$2.90449 - 4.36039I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.791899+0.115857I$ $a=\ \ 0.458376-0.091009I$ $b=\ \ 0.915727+0.059496I$	$3.54705-0.01004I$	$10.61413-1.28755I$
$u=-0.791899-0.115857I$ $a=\ \ 0.458376+0.091009I$ $b=\ \ 0.915727-0.059496I$	$3.54705+0.01004I$	$10.61413+1.28755I$
$u=\ \ 0.231354+0.517578I$ $a=-0.34516-2.70664I$ $b=\ \ 0.205725+0.843817I$	$0.70306+1.50488I$	$1.38672-8.70491I$
$u=\ \ 0.231354-0.517578I$ $a=-0.34516+2.70664I$ $b=\ \ 0.205725-0.843817I$	$0.70306-1.50488I$	$1.38672+8.70491I$
$u=\ \ 1.20809+0.84251I$ $a=\ \ 0.628241+0.196989I$ $b=\ \ 0.41864+1.39129I$	$-0.85413+4.66448I$	$7.24755-5.70143I$
$u=\ \ 1.20809-0.84251I$ $a=\ \ 0.628241-0.196989I$ $b=\ \ 0.41864-1.39129I$	$-0.85413-4.66448I$	$7.24755+5.70143I$
$u=-0.001953+0.372411I$ $a=-1.81291-1.77055I$ $b=-0.710684-0.658976I$	$-0.954258-0.910761I$	$7.17839-3.05875I$
$u=-0.001953-0.372411I$ $a=-1.81291+1.77055I$ $b=-0.710684+0.658976I$	$-0.954258+0.910761I$	$7.17839+3.05875I$
$u=-0.96547+1.31719I$ $a=-0.814621+0.048696I$ $b=-0.615052+1.219520I$	$-0.76029-8.11167I$	$3.91676+7.17455I$
$u=-0.96547-1.31719I$ $a=-0.814621-0.048696I$ $b=-0.615052-1.219520I$	$-0.76029+8.11167I$	$3.91676-7.17455I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.37791 + 1.60370I$		
$a = -0.454559 + 0.086376I$	$-4.08064 + 1.37556I$	$5.91066 - 3.80739I$
$b = -0.316854 - 1.049130I$		
$u = \quad 0.37791 - 1.60370I$		
$a = -0.454559 - 0.086376I$	$-4.08064 - 1.37556I$	$5.91066 + 3.80739I$
$b = -0.316854 + 1.049130I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{22}-23u^{21}+\cdots-11u+1)(u^{61}+80u^{60}+\cdots+86779u+2401)$
c_2	$(u^{22}-u^{21}+\cdots+u+1)(u^{61}-2u^{60}+\cdots+441u-49)$
c_3	$(u^{22}+u^{20}+\cdots+7u^2+1)(u^{61}+u^{60}+\cdots+58u-25)$
c_4	$(u^{22}+u^{21}+\cdots+u+7)(u^{61}-2u^{60}+\cdots-33u-19)$
c_5	$(u^{22}-u^{21}+\cdots-3u+5)(u^{61}-2u^{60}+\cdots+261u-29)$
c_6	$(u^{22}+u^{21}+\cdots-u+1)(u^{61}-2u^{60}+\cdots+441u-49)$
c_7	$(u^{22}+u^{21}+\cdots-4u+1)(u^{61}+2u^{60}+\cdots-276u-333)$
c_8	$(u^{22}+u^{21}+\cdots+3u+5)(u^{61}-2u^{60}+\cdots+261u-29)$
c_9	$(u^{22}-u^{21}+\cdots+u+1)(u^{61}-2u^{60}+\cdots+96105u-40873)$
c_{10}	$(u^{22}+u^{21}+\cdots-10u+1)(u^{61}+2u^{60}+\cdots-3730060u-1063025)$
c_{11}	$(u^{22}-u^{21}+\cdots-u+7)(u^{61}-2u^{60}+\cdots-33u-19)$
c_{12}	$(u^{22}+6u^{20}+\cdots-5u^2+1)(u^{61}+u^{60}+\cdots+24262u-3637)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{22} - 39y^{21} + \cdots - 3y + 1)$ $\cdot (y^{61} - 188y^{60} + \cdots - 978957329y - 5764801)$
c_2, c_6	$(y^{22} - 23y^{21} + \cdots - 11y + 1)(y^{61} - 80y^{60} + \cdots + 86779y - 2401)$
c_3	$(y^{22} + 2y^{21} + \cdots + 14y + 1)(y^{61} + 9y^{60} + \cdots - 4186y - 625)$
c_4, c_{11}	$(y^{22} + 15y^{21} + \cdots + 377y + 49)(y^{61} + 42y^{60} + \cdots + 367y - 361)$
c_5, c_8	$(y^{22} - 19y^{21} + \cdots - 289y + 25)(y^{61} - 24y^{60} + \cdots + 17197y - 841)$
c_7	$(y^{22} + 9y^{21} + \cdots - 4y + 1)(y^{61} + 24y^{60} + \cdots - 3453624y - 110889)$
c_9	$(y^{22} + 15y^{21} + \cdots + 21y + 1)$ $\cdot (y^{61} + 106y^{60} + \cdots - 28850843549y - 1670602129)$
c_{10}	$(y^{22} + 15y^{21} + \cdots + 38y + 1)$ $\cdot (y^{61} + 50y^{60} + \cdots + 4847404798650y - 1130022150625)$
c_{12}	$(y^{22} + 12y^{21} + \cdots - 10y + 1)$ $\cdot (y^{61} + 83y^{60} + \cdots - 463357606y - 13227769)$