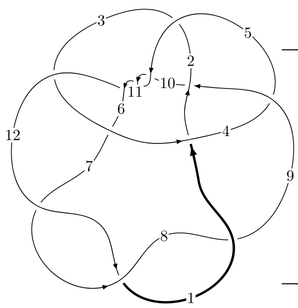
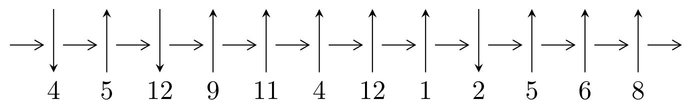
$12n_{0683}$ $(K12n_{0683})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -2.19867 \times 10^{203} u^{56} + 5.65768 \times 10^{203} u^{55} + \cdots + 1.13098 \times 10^{204} b - 3.04242 \times 10^{203},$$
$$1.01630 \times 10^{202} u^{56} - 2.54589 \times 10^{202} u^{55} + \cdots + 4.34992 \times 10^{202} a - 1.92664 \times 10^{204},\ u^{57} - 2u^{56} + \cdots + 99u$$
$$I_2^u = \langle -190u^{12} + 1765u^{11} + \cdots + 334b + 209,\ -1291u^{12} + 11918u^{11} + \cdots + 167a - 2972,$$
$$u^{13} - 9u^{12} + 40u^{11} - 112u^{10} + 212u^9 - 270u^8 + 213u^7 - 70u^6 - 43u^5 + 56u^4 - 13u^3 - 10u^2 + 3u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 70 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. $I_1^u = \langle -2.20 \times 10^{203} u^{56} + 5.66 \times 10^{203} u^{55} + \cdots + 1.13 \times 10^{204} b - 3.04 \times 10^{203},\ 1.02 \times 10^{202} u^{56} - 2.55 \times 10^{202} u^{55} + \cdots + 4.35 \times 10^{202} a - 1.93 \times 10^{204},\ u^{57} - 2u^{56} + \cdots + 99u + 1 \rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -0.233636u^{56} + 0.585272u^{55} + \cdots + 376.156u + 44.2914 \\ 0.194404u^{56} - 0.500246u^{55} + \cdots - 3.13746u + 0.269007 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.0392325u^{56} + 0.0850261u^{55} + \cdots + 373.019u + 44.5604 \\ 0.194404u^{56} - 0.500246u^{55} + \cdots - 3.13746u + 0.269007 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -0.709204u^{56} + 1.81312u^{55} + \cdots + 1.23457u - 20.2316 \\ 0.113804u^{56} - 0.292360u^{55} + \cdots + 60.6616u + 0.512414 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.206310u^{56} + 0.511643u^{55} + \cdots + 375.546u + 44.2848 \\ 0.152217u^{56} - 0.398947u^{55} + \cdots - 12.1241u + 0.176546 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.211474u^{56} + 0.400072u^{55} + \cdots - 355.701u + 11.0408 \\ -0.300940u^{56} + 0.738560u^{55} + \cdots - 111.054u - 1.10820 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1.16949u^{56} - 2.32458u^{55} + \cdots + 1535.29u + 14.9071 \\ -0.275037u^{56} + 0.741382u^{55} + \cdots + 63.4359u + 0.800985 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1.71051u^{56} - 3.73781u^{55} + \cdots + 1743.01u + 54.3756 \\ -0.170202u^{56} + 0.417387u^{55} + \cdots + 3.50097u + 0.427858 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1.71051u^{56} - 3.73781u^{55} + \cdots + 1743.01u + 54.3756 \\ -0.0441047u^{56} + 0.107941u^{55} + \cdots + 33.1523u + 0.744645 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.0330544u^{56} - 0.0970298u^{55} + \cdots - 433.886u + 25.2387 \\ -0.0307323u^{56} + 0.0397139u^{55} + \cdots - 103.215u - 0.950993 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.49472u^{56} - 3.47198u^{55} + \cdots + 455.723u + 19.2896$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{57} + 2u^{56} + \cdots + 99u - 1$
c_2	$u^{57} + u^{56} + \cdots - 217u + 31$
c_3	$u^{57} + 2u^{56} + \cdots - 3u - 1$
c_4	$u^{57} + 2u^{56} + \cdots - 23u - 19$
c_5, c_{10}, c_{11}	$u^{57} - u^{56} + \cdots + 2u - 1$
c_6	$u^{57} + 18u^{55} + \cdots - 3u - 1$
c_7, c_8, c_{12}	$u^{57} + u^{56} + \cdots - 27u - 9$
c_9	$u^{57} - 2u^{56} + \cdots - 15u - 19$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{57} - 8y^{56} + \cdots + 6183y - 1$
c_2	$y^{57} + 45y^{56} + \cdots - 77345y - 961$
c_3	$y^{57} - 36y^{56} + \cdots + 175y - 1$
c_4	$y^{57} - 20y^{56} + \cdots + 7483y - 361$
c_5, c_{10}, c_{11}	$y^{57} - 43y^{56} + \cdots - 26y - 1$
c_6	$y^{57} + 36y^{56} + \cdots - 413y - 1$
c_7, c_8, c_{12}	$y^{57} - 47y^{56} + \cdots - 81y - 81$
c_9	$y^{57} - 40y^{56} + \cdots + 29903y - 361$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.982069$ $a=\ 0.271580$ $b=-1.32023$	5.72850	18.2470
$u=\ 0.787849+0.663146I$ $a=\ 0.111327-0.249352I$ $b=-0.079251-0.513820I$	$-1.39291-1.49817I$	0
$u=\ 0.787849-0.663146I$ $a=\ 0.111327+0.249352I$ $b=-0.079251+0.513820I$	$-1.39291+1.49817I$	0
$u=\ 0.029607+1.080220I$ $a=-1.50186+0.62457I$ $b=\ 1.091320-0.039504I$	$1.80896-0.59182I$	0
$u=\ 0.029607-1.080220I$ $a=-1.50186-0.62457I$ $b=\ 1.091320+0.039504I$	$1.80896+0.59182I$	0
$u=\ 0.882972$ $a=-1.33547$ $b=-1.08958$	8.40411	7.98810
$u=\ 0.933561+0.625124I$ $a=\ 0.853667-0.081695I$ $b=-0.474635-0.684470I$	$-0.25852-1.69884I$	0
$u=\ 0.933561-0.625124I$ $a=\ 0.853667+0.081695I$ $b=-0.474635+0.684470I$	$-0.25852+1.69884I$	0
$u=\ 0.403090+0.774689I$ $a=-0.592456-0.151652I$ $b=\ 0.221654+0.904852I$	$1.91455-2.21031I$	$13.12081+2.10550I$
$u=\ 0.403090-0.774689I$ $a=-0.592456+0.151652I$ $b=\ 0.221654-0.904852I$	$1.91455+2.21031I$	$13.12081-2.10550I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.133930 + 0.358505I$ $a = 0.0031594 + 0.0941549I$ $b = 0.016164 - 0.679191I$	$-1.85634 - 1.60964I$	0
$u = 1.133930 - 0.358505I$ $a = 0.0031594 - 0.0941549I$ $b = 0.016164 + 0.679191I$	$-1.85634 + 1.60964I$	0
$u = -1.183600 + 0.191183I$ $a = 0.457183 + 0.050936I$ $b = 0.192168 + 0.919003I$	$-3.95643 - 2.45863I$	0
$u = -1.183600 - 0.191183I$ $a = 0.457183 - 0.050936I$ $b = 0.192168 - 0.919003I$	$-3.95643 + 2.45863I$	0
$u = -1.186880 + 0.423414I$ $a = -0.286902 + 0.017571I$ $b = -0.171028 - 1.023880I$	$-8.10408 + 3.62915I$	0
$u = -1.186880 - 0.423414I$ $a = -0.286902 - 0.017571I$ $b = -0.171028 + 1.023880I$	$-8.10408 - 3.62915I$	0
$u = -1.110700 + 0.610435I$ $a = 0.153762 - 0.058890I$ $b = 0.164353 + 1.087850I$	$-3.81501 + 9.61156I$	0
$u = -1.110700 - 0.610435I$ $a = 0.153762 + 0.058890I$ $b = 0.164353 - 1.087850I$	$-3.81501 - 9.61156I$	0
$u = -0.294530 + 0.662947I$ $a = 1.31292 - 1.50192I$ $b = -1.209010 - 0.204626I$	$6.60552 + 1.19209I$	$14.3056 - 1.0519I$
$u = -0.294530 - 0.662947I$ $a = 1.31292 + 1.50192I$ $b = -1.209010 + 0.204626I$	$6.60552 - 1.19209I$	$14.3056 + 1.0519I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.721188 + 0.010661I$ $a = -1.56524 + 0.58708I$ $b = 0.655013 + 0.306013I$	$0.254039 + 0.524135I$	$8.44441 - 3.12759I$
$u = 0.721188 - 0.010661I$ $a = -1.56524 - 0.58708I$ $b = 0.655013 - 0.306013I$	$0.254039 - 0.524135I$	$8.44441 + 3.12759I$
$u = 0.443363 + 1.220500I$ $a = 0.471429 + 0.461395I$ $b = -0.130344 + 0.192510I$	$0.83147 - 4.60750I$	0
$u = 0.443363 - 1.220500I$ $a = 0.471429 - 0.461395I$ $b = -0.130344 - 0.192510I$	$0.83147 + 4.60750I$	0
$u = 1.16130 + 0.85091I$ $a = -1.330120 - 0.083967I$ $b = 1.371540 - 0.229175I$	$2.34247 - 1.46589I$	0
$u = 1.16130 - 0.85091I$ $a = -1.330120 + 0.083967I$ $b = 1.371540 + 0.229175I$	$2.34247 + 1.46589I$	0
$u = 0.553554$ $a = 1.08209$ $b = -1.86480$	11.0296	-7.52950
$u = -0.482542 + 0.186548I$ $a = -3.17532 + 1.59578I$ $b = 1.163130 + 0.461068I$	$-0.97671 + 7.38058I$	$7.33354 - 5.78645I$
$u = -0.482542 - 0.186548I$ $a = -3.17532 - 1.59578I$ $b = 1.163130 - 0.461068I$	$-0.97671 - 7.38058I$	$7.33354 + 5.78645I$
$u = 0.76598 + 1.28507I$ $a = -1.58483 - 0.83064I$ $b = 1.260720 - 0.166493I$	$4.98441 - 6.28398I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.76598 - 1.28507I$ $a = -1.58483 + 0.83064I$ $b = 1.260720 + 0.166493I$	$4.98441 + 6.28398I$	0
$u = -0.481796 + 0.025652I$ $a = 2.48626 - 1.61462I$ $b = -1.162050 - 0.579686I$	$-5.07361 + 1.99676I$	$3.51787 - 1.41521I$
$u = -0.481796 - 0.025652I$ $a = 2.48626 + 1.61462I$ $b = -1.162050 + 0.579686I$	$-5.07361 - 1.99676I$	$3.51787 + 1.41521I$
$u = -1.52665$ $a = -0.719721$ $b = 1.64459$	15.0211	0
$u = 0.58877 + 1.42087I$ $a = -1.281560 - 0.148995I$ $b = 1.269080 - 0.517238I$	$5.24676 - 7.48865I$	0
$u = 0.58877 - 1.42087I$ $a = -1.281560 + 0.148995I$ $b = 1.269080 + 0.517238I$	$5.24676 + 7.48865I$	0
$u = -0.414150 + 0.153678I$ $a = -1.80595 - 1.43113I$ $b = 1.192780 - 0.738076I$	$-0.73053 + 3.35751I$	$5.35994 - 3.89314I$
$u = -0.414150 - 0.153678I$ $a = -1.80595 + 1.43113I$ $b = 1.192780 + 0.738076I$	$-0.73053 - 3.35751I$	$5.35994 + 3.89314I$
$u = 0.93882 + 1.32829I$ $a = 1.277810 + 0.317518I$ $b = -1.218700 + 0.340067I$	$1.96594 - 4.89349I$	0
$u = 0.93882 - 1.32829I$ $a = 1.277810 - 0.317518I$ $b = -1.218700 - 0.340067I$	$1.96594 + 4.89349I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.06256 + 1.30003I$ $a = 1.49425 + 0.25593I$ $b = -1.284040 + 0.299476I$	$2.20041 - 5.20017I$	0
$u = 1.06256 - 1.30003I$ $a = 1.49425 - 0.25593I$ $b = -1.284040 - 0.299476I$	$2.20041 + 5.20017I$	0
$u = -0.245067$ $a = -5.94703$ $b = -0.611130$	7.03759	21.9860
$u = -1.67017 + 0.65889I$ $a = 0.966468 - 0.185623I$ $b = -1.46672 - 0.42530I$	$1.33651 + 2.42655I$	0
$u = -1.67017 - 0.65889I$ $a = 0.966468 + 0.185623I$ $b = -1.46672 + 0.42530I$	$1.33651 - 2.42655I$	0
$u = 1.63108 + 0.83574I$ $a = -0.514592 - 0.394322I$ $b = 0.999285 - 0.104423I$	$0.85956 - 1.26664I$	0
$u = 1.63108 - 0.83574I$ $a = -0.514592 + 0.394322I$ $b = 0.999285 + 0.104423I$	$0.85956 + 1.26664I$	0
$u = -1.41187 + 1.18997I$ $a = 1.215900 - 0.316935I$ $b = -1.42291 - 0.49714I$	$1.1499 + 15.2354I$	0
$u = -1.41187 - 1.18997I$ $a = 1.215900 + 0.316935I$ $b = -1.42291 + 0.49714I$	$1.1499 - 15.2354I$	0
$u = -1.56697 + 1.00586I$ $a = -1.115510 + 0.256262I$ $b = 1.42807 + 0.47889I$	$-3.07994 + 9.01753I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.56697-1.00586I$ $a=-1.115510-0.256262I$ $b=1.42807-0.47889I$	$-3.07994-9.01753I$	0
$u=-0.0788245$ $a=15.9721$ $b=1.39717$	6.57350	13.9620
$u=1.29095+1.44646I$ $a=0.894273+0.319702I$ $b=-0.999227+0.285270I$	$1.26758-5.50057I$	0
$u=1.29095-1.44646I$ $a=0.894273-0.319702I$ $b=-0.999227-0.285270I$	$1.26758+5.50057I$	0
$u=-0.0129360$ $a=39.3944$ $b=0.359528$	0.705153	14.5050
$u=-0.38434+1.96202I$ $a=1.196960-0.374494I$ $b=-1.165110+0.090048I$	$3.76984-4.85515I$	0
$u=-0.38434-1.96202I$ $a=1.196960+0.374494I$ $b=-1.165110-0.090048I$	$3.76984+4.85515I$	0

II. $I_2^u = \langle -190u^{12} + 1765u^{11} + \cdots + 334b + 209,\ -1291u^{12} + 11918u^{11} + \cdots + 167a - 2972,\ u^{13} - 9u^{12} + \cdots + 3u + 1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 7.73054u^{12} - 71.3653u^{11} + \cdots - 2.63473u + 17.7964 \\ 0.568862u^{12} - 5.28443u^{11} + \cdots + 3.78443u - 0.625749 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 8.29940u^{12} - 76.6497u^{11} + \cdots + 1.14970u + 17.1707 \\ 0.568862u^{12} - 5.28443u^{11} + \cdots + 3.78443u - 0.625749 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 12.4760u^{12} - 117.988u^{11} + \cdots + 18.4880u + 42.8263 \\ 1.26946u^{12} - 12.1347u^{11} + \cdots + 5.63473u + 4.70359 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 9.36228u^{12} - 85.9311u^{11} + \cdots - 5.06886u + 19.7515 \\ 0.736527u^{12} - 6.86826u^{11} + \cdots + 1.86826u - 0.910180 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -6.97305u^{12} + 64.7365u^{11} + \cdots + 0.763473u - 17.1796 \\ 2.26946u^{12} - 21.1347u^{11} + \cdots - 5.36527u + 8.70359 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 18.1796u^{12} - 170.590u^{11} + \cdots + 13.0898u + 56.3024 \\ 1.97904u^{12} - 18.7395u^{11} + \cdots + 4.73952u + 5.97305 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2.52395u^{12} + 24.5120u^{11} + \cdots - 11.5120u - 7.67365 \\ 3.33832u^{12} - 30.9192u^{11} + \cdots - 10.0808u + 12.5778 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -2.52395u^{12} + 24.5120u^{11} + \cdots - 11.5120u - 7.67365 \\ 3.10778u^{12} - 28.5539u^{11} + \cdots - 12.9461u + 10.7814 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -17.8533u^{12} + 165.677u^{11} + \cdots + 9.82335u - 48.3114 \\ -7.58683u^{12} + 69.7934u^{11} + \cdots + 10.7066u - 22.2545 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{1829}{334}u^{12} - \frac{8014}{167}u^{11} + \frac{69353}{334}u^{10} - \frac{187907}{334}u^9 + \frac{169690}{167}u^8 - \frac{398167}{334}u^7 + \frac{128115}{167}u^6 + \frac{5}{2}u^5 - \frac{79988}{167}u^4 + \frac{128227}{334}u^3 - \frac{10968}{167}u^2 - \frac{22549}{334}u + \frac{4313}{167}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{13} - 9u^{12} + \cdots + 3u + 1$
c_2	$u^{13} + 4u^{12} + \cdots - 3u - 1$
c_3	$u^{13} - 3u^{12} + \cdots - 3u + 1$
c_4	$u^{13} + u^{12} + \cdots + u + 1$
c_5	$u^{13} - 8u^{11} + \cdots + 6u + 1$
c_6	$u^{13} - u^{12} + 2u^{11} - 2u^9 + 3u^8 - 4u^7 + 3u^6 + 4u^5 - 4u^4 + u^3 - 3u - 1$
c_7, c_8	$u^{13} - 8u^{11} + \cdots + 3u - 1$
c_9	$u^{13} - u^{12} + \cdots + u - 1$
c_{10}, c_{11}	$u^{13} - 8u^{11} + \cdots + 6u - 1$
c_{12}	$u^{13} - 8u^{11} + \cdots + 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{13} - y^{12} + \cdots + 29y - 1$
c_2	$y^{13} + 4y^{12} + \cdots + y - 1$
c_3	$y^{13} - 9y^{12} + \cdots + 13y - 1$
c_4	$y^{13} - 13y^{12} + \cdots + 9y - 1$
c_5, c_{10}, c_{11}	$y^{13} - 16y^{12} + \cdots + 36y - 1$
c_6	$y^{13} + 3y^{12} + \cdots + 9y - 1$
c_7, c_8, c_{12}	$y^{13} - 16y^{12} + \cdots + 5y - 1$
c_9	$y^{13} - 9y^{12} + \cdots + 13y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.435709 + 0.993312I$ $a = -0.520595 - 0.029912I$ $b = 0.654428 + 0.601760I$	$0.97353 - 3.17072I$	$9.28444 + 4.13212I$
$u = 0.435709 - 0.993312I$ $a = -0.520595 + 0.029912I$ $b = 0.654428 - 0.601760I$	$0.97353 + 3.17072I$	$9.28444 - 4.13212I$
$u = 1.061160 + 0.495497I$ $a = 0.732805 - 0.137224I$ $b = -0.251004 - 0.343068I$	$-0.770496 - 0.447544I$	$3.02105 - 1.83729I$
$u = 1.061160 - 0.495497I$ $a = 0.732805 + 0.137224I$ $b = -0.251004 + 0.343068I$	$-0.770496 + 0.447544I$	$3.02105 + 1.83729I$
$u = 0.617945$ $a = -2.31410$ $b = -0.498845$	6.70177	-2.62380
$u = -0.419309$ $a = 1.25732$ $b = 1.36971$	4.85657	7.56690
$u = 1.65121$ $a = -0.801610$ $b = 1.66990$	14.7388	-2.01490
$u = -0.347490$ $a = -4.66144$ $b = -1.19869$	9.08187	20.5940
$u = -0.284103$ $a = -0.246049$ $b = -1.84911$	11.2546	28.4090
$u = 1.58796 + 1.06438I$ $a = 1.076420 + 0.264698I$ $b = -1.342970 + 0.254848I$	$3.10162 - 2.88236I$	$11.48583 + 3.31049I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.58796 - 1.06438I$ $a = 1.076420 - 0.264698I$ $b = -1.342970 - 0.254848I$	$3.10162 + 2.88236I$	$11.48583 - 3.31049I$
$u = 0.80605 + 1.83438I$ $a = -1.40570 - 0.19218I$ $b = 1.193070 - 0.241401I$	$2.98736 - 6.12170I$	$10.74301 + 9.13523I$
$u = 0.80605 - 1.83438I$ $a = -1.40570 + 0.19218I$ $b = 1.193070 + 0.241401I$	$2.98736 + 6.12170I$	$10.74301 - 9.13523I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{13} - 9u^{12} + \cdots + 3u + 1)(u^{57} + 2u^{56} + \cdots + 99u - 1)$
c_2	$(u^{13} + 4u^{12} + \cdots - 3u - 1)(u^{57} + u^{56} + \cdots - 217u + 31)$
c_3	$(u^{13} - 3u^{12} + \cdots - 3u + 1)(u^{57} + 2u^{56} + \cdots - 3u - 1)$
c_4	$(u^{13} + u^{12} + \cdots + u + 1)(u^{57} + 2u^{56} + \cdots - 23u - 19)$
c_5	$(u^{13} - 8u^{11} + \cdots + 6u + 1)(u^{57} - u^{56} + \cdots + 2u - 1)$
c_6	$(u^{13} - u^{12} + 2u^{11} - 2u^9 + 3u^8 - 4u^7 + 3u^6 + 4u^5 - 4u^4 + u^3 - 3u - 1)$ $\cdot (u^{57} + 18u^{55} + \cdots - 3u - 1)$
c_7, c_8	$(u^{13} - 8u^{11} + \cdots + 3u - 1)(u^{57} + u^{56} + \cdots - 27u - 9)$
c_9	$(u^{13} - u^{12} + \cdots + u - 1)(u^{57} - 2u^{56} + \cdots - 15u - 19)$
c_{10}, c_{11}	$(u^{13} - 8u^{11} + \cdots + 6u - 1)(u^{57} - u^{56} + \cdots + 2u - 1)$
c_{12}	$(u^{13} - 8u^{11} + \cdots + 3u + 1)(u^{57} + u^{56} + \cdots - 27u - 9)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{13} - y^{12} + \cdots + 29y - 1)(y^{57} - 8y^{56} + \cdots + 6183y - 1)$
c_2	$(y^{13} + 4y^{12} + \cdots + y - 1)(y^{57} + 45y^{56} + \cdots - 77345y - 961)$
c_3	$(y^{13} - 9y^{12} + \cdots + 13y - 1)(y^{57} - 36y^{56} + \cdots + 175y - 1)$
c_4	$(y^{13} - 13y^{12} + \cdots + 9y - 1)(y^{57} - 20y^{56} + \cdots + 7483y - 361)$
c_5, c_{10}, c_{11}	$(y^{13} - 16y^{12} + \cdots + 36y - 1)(y^{57} - 43y^{56} + \cdots - 26y - 1)$
c_6	$(y^{13} + 3y^{12} + \cdots + 9y - 1)(y^{57} + 36y^{56} + \cdots - 413y - 1)$
c_7, c_8, c_{12}	$(y^{13} - 16y^{12} + \cdots + 5y - 1)(y^{57} - 47y^{56} + \cdots - 81y - 81)$
c_9	$(y^{13} - 9y^{12} + \cdots + 13y - 1)(y^{57} - 40y^{56} + \cdots + 29903y - 361)$