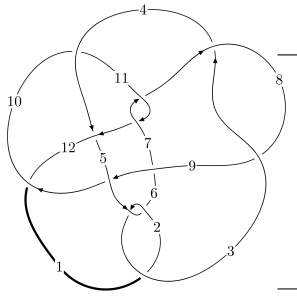
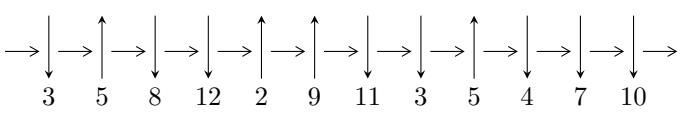
$12n_{0498}$ $(K12n_{0498})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -1.28050 \times 10^{86} u^{56} + 4.68989 \times 10^{86} u^{55} + \cdots + 2.10970 \times 10^{86} b + 1.03141 \times 10^{87}, \\ & - 3.61697 \times 10^{87} u^{56} + 1.86009 \times 10^{88} u^{55} + \cdots + 4.43037 \times 10^{87} a - 5.59465 \times 10^{88}, \\ & u^{57} - 4u^{56} + \cdots - 62u - 21 \rangle \\ I_2^u = \langle & -15113u^{17} - 4096u^{16} + \cdots + 48267b + 50891,\ -57716u^{17} - 93541u^{16} + \cdots + 48267a - 66022, \\ & u^{18} + u^{17} + \cdots - 2u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 75 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. $\boldsymbol{I_1^u = \langle -1.28 \times 10^{86} u^{56} + 4.69 \times 10^{86} u^{55} + \cdots + 2.11 \times 10^{86} b + 1.03 \times 10^{87},\ -3.62 \times 10^{87} u^{56} + 1.86 \times 10^{88} u^{55} + \cdots + 4.43 \times 10^{87} a - 5.59 \times 10^{88},\ u^{57} - 4u^{56} + \cdots - 62u - 21 \rangle}$

(i) Arc colorings

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

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

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

$$a_4 = \begin{pmatrix} 0.816403u^{56} - 4.19849u^{55} + \cdots + 20.7488u + 12.6279 \\ 0.606959u^{56} - 2.22301u^{55} + \cdots - 20.5606u - 4.88890 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 2.30955u^{56} - 11.2943u^{55} + \cdots + 35.9973u + 27.9170 \\ -0.886184u^{56} + 4.87279u^{55} + \cdots - 35.8091u - 20.1780 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.99634u^{56} - 9.90547u^{55} + \cdots + 40.8820u + 27.3294 \\ -0.548286u^{56} + 3.70956u^{55} + \cdots - 56.9911u - 25.6210 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 3.51044u^{56} - 14.4661u^{55} + \cdots - 81.7519u - 6.53532 \\ -2.08388u^{56} + 9.47088u^{55} + \cdots + 4.37789u - 13.5178 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.97921u^{56} - 6.06505u^{55} + \cdots - 142.339u - 41.3394 \\ -1.76709u^{56} + 5.94502u^{55} + \cdots + 103.790u + 27.5904 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.72233u^{56} + 5.91243u^{55} + \cdots + 107.267u + 26.4979 \\ 1.60637u^{56} - 5.58082u^{55} + \cdots - 93.6083u - 22.6130 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 2.28317u^{56} - 6.62101u^{55} + \cdots - 179.695u - 51.6320 \\ -1.95007u^{56} + 6.01101u^{55} + \cdots + 139.623u + 39.1357 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.693372u^{56} - 3.19613u^{55} + \cdots - 2.95802u + 4.39385 \\ 0.216527u^{56} - 0.0576321u^{55} + \cdots - 40.4916u - 13.8044 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.42071u^{56} + 9.29216u^{55} + \cdots + 95.3134u + 10.7280$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{57} + 75u^{56} + \cdots - 178u - 1$
c_2, c_5	$u^{57} - u^{56} + \cdots - 16u + 1$
c_3, c_8	$u^{57} - u^{56} + \cdots - 493u + 451$
c_4	$u^{57} + 3u^{56} + \cdots - 7u + 3$
c_6	$u^{57} + u^{56} + \cdots + 117087u + 163159$
c_7, c_{11}	$u^{57} + 4u^{56} + \cdots - 62u + 21$
c_9	$u^{57} - 2u^{56} + \cdots + 1465u + 32979$
c_{10}	$u^{57} + 7u^{55} + \cdots + 397u + 97$
c_{12}	$u^{57} - 14u^{56} + \cdots + 669u + 151$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{57} - 177y^{56} + \cdots + 14174y - 1$
c_2, c_5	$y^{57} + 75y^{56} + \cdots - 178y - 1$
c_3, c_8	$y^{57} + 31y^{56} + \cdots - 4225459y - 203401$
c_4	$y^{57} - 9y^{56} + \cdots + 91y - 9$
c_6	$y^{57} + 107y^{56} + \cdots - 82651034559y - 26620859281$
c_7, c_{11}	$y^{57} + 44y^{56} + \cdots - 6698y - 441$
c_9	$y^{57} + 78y^{56} + \cdots + 20424721765y - 1087614441$
c_{10}	$y^{57} + 14y^{56} + \cdots - 194501y - 9409$
c_{12}	$y^{57} - 40y^{56} + \cdots + 3746609y - 22801$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.590251 + 0.816756I$ $a = -0.317194 - 0.867682I$ $b = 0.851232 + 0.408615I$	$-0.92370 - 2.38461I$	$-6.78715 - 4.77142I$
$u = 0.590251 - 0.816756I$ $a = -0.317194 + 0.867682I$ $b = 0.851232 - 0.408615I$	$-0.92370 + 2.38461I$	$-6.78715 + 4.77142I$
$u = 0.386358 + 0.881902I$ $a = -1.004400 - 0.119570I$ $b = 1.290360 - 0.133007I$	$-0.66188 - 1.95236I$	$-7.77812 + 3.23861I$
$u = 0.386358 - 0.881902I$ $a = -1.004400 + 0.119570I$ $b = 1.290360 + 0.133007I$	$-0.66188 + 1.95236I$	$-7.77812 - 3.23861I$
$u = -0.113138 + 1.043540I$ $a = 0.010650 + 1.316020I$ $b = 0.398262 - 0.207554I$	$1.52820 + 3.04852I$	$-2.09627 - 4.89869I$
$u = -0.113138 - 1.043540I$ $a = 0.010650 - 1.316020I$ $b = 0.398262 + 0.207554I$	$1.52820 - 3.04852I$	$-2.09627 + 4.89869I$
$u = -0.054065 + 1.061160I$ $a = -0.673299 - 0.339769I$ $b = 1.23289 - 1.36328I$	$4.35464 + 0.41270I$	$0. + 2.93923I$
$u = -0.054065 - 1.061160I$ $a = -0.673299 + 0.339769I$ $b = 1.23289 + 1.36328I$	$4.35464 - 0.41270I$	$0. - 2.93923I$
$u = -0.135302 + 1.081390I$ $a = 0.86661 - 2.26881I$ $b = -1.29656 + 1.44749I$	$-7.16107 + 4.13510I$	0
$u = -0.135302 - 1.081390I$ $a = 0.86661 + 2.26881I$ $b = -1.29656 - 1.44749I$	$-7.16107 - 4.13510I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.563215 + 0.991464I$ $a = 0.95892 + 1.31146I$ $b = -1.68040 - 0.81381I$	$-6.73101 - 1.00486I$	0
$u = 0.563215 - 0.991464I$ $a = 0.95892 - 1.31146I$ $b = -1.68040 + 0.81381I$	$-6.73101 + 1.00486I$	0
$u = 0.076850 + 1.138320I$ $a = 0.774845 - 0.307436I$ $b = -1.84851 + 0.66895I$	$2.81588 - 1.84751I$	0
$u = 0.076850 - 1.138320I$ $a = 0.774845 + 0.307436I$ $b = -1.84851 - 0.66895I$	$2.81588 + 1.84751I$	0
$u = -0.210776 + 1.134080I$ $a = -0.376842 + 0.250683I$ $b = 1.62012 + 0.80598I$	$1.73829 + 3.89054I$	0
$u = -0.210776 - 1.134080I$ $a = -0.376842 - 0.250683I$ $b = 1.62012 - 0.80598I$	$1.73829 - 3.89054I$	0
$u = -0.758593 + 0.355885I$ $a = 0.642976 + 0.011129I$ $b = 0.033112 + 0.742505I$	$-0.664386 - 0.689297I$	$-6.71036 - 0.11936I$
$u = -0.758593 - 0.355885I$ $a = 0.642976 - 0.011129I$ $b = 0.033112 - 0.742505I$	$-0.664386 + 0.689297I$	$-6.71036 + 0.11936I$
$u = -0.778647 + 0.303273I$ $a = -1.16942 - 0.93924I$ $b = 0.147887 - 0.411465I$	$-12.42110 - 2.33478I$	$-9.22240 + 0.68624I$
$u = -0.778647 - 0.303273I$ $a = -1.16942 + 0.93924I$ $b = 0.147887 + 0.411465I$	$-12.42110 + 2.33478I$	$-9.22240 - 0.68624I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.179050 + 0.038215I$ $a = -0.705861 - 0.743030I$ $b = -0.185989 + 0.148446I$	$-9.92606 - 9.08178I$	0
$u = 1.179050 - 0.038215I$ $a = -0.705861 + 0.743030I$ $b = -0.185989 - 0.148446I$	$-9.92606 + 9.08178I$	0
$u = -0.413385 + 1.107260I$ $a = 0.654823 + 0.404099I$ $b = -2.11452 - 1.09525I$	$-9.95724 + 6.72104I$	0
$u = -0.413385 - 1.107260I$ $a = 0.654823 - 0.404099I$ $b = -2.11452 + 1.09525I$	$-9.95724 - 6.72104I$	0
$u = 0.039564 + 1.190590I$ $a = 0.613863 - 0.424692I$ $b = -1.80875 - 0.41422I$	$3.76883 - 1.63591I$	0
$u = 0.039564 - 1.190590I$ $a = 0.613863 + 0.424692I$ $b = -1.80875 + 0.41422I$	$3.76883 + 1.63591I$	0
$u = 1.218100 + 0.242266I$ $a = 0.507438 + 0.284538I$ $b = 0.1171880 - 0.0218347I$	$-1.64373 - 3.94719I$	0
$u = 1.218100 - 0.242266I$ $a = 0.507438 - 0.284538I$ $b = 0.1171880 + 0.0218347I$	$-1.64373 + 3.94719I$	0
$u = 0.254408 + 1.227690I$ $a = -0.823428 + 0.385148I$ $b = 2.00617 + 0.66223I$	$-4.08404 - 6.16672I$	0
$u = 0.254408 - 1.227690I$ $a = -0.823428 - 0.385148I$ $b = 2.00617 - 0.66223I$	$-4.08404 + 6.16672I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.727598+0.137352I$ $a=-0.875509+0.961139I$ $b=-0.173507-0.506822I$	$2.46442+1.93449I$	$2.24278-3.17004I$
$u=-0.727598-0.137352I$ $a=-0.875509-0.961139I$ $b=-0.173507+0.506822I$	$2.46442-1.93449I$	$2.24278+3.17004I$
$u=-0.392456+1.219230I$ $a=-1.257630-0.153845I$ $b=2.26538+0.66065I$	$1.90935+6.56503I$	0
$u=-0.392456-1.219230I$ $a=-1.257630+0.153845I$ $b=2.26538-0.66065I$	$1.90935-6.56503I$	0
$u=0.010268+0.689208I$ $a=2.53605+1.22720I$ $b=-2.04707-1.45230I$	$-8.64761-3.10440I$	$-7.56449-2.31310I$
$u=0.010268-0.689208I$ $a=2.53605-1.22720I$ $b=-2.04707+1.45230I$	$-8.64761+3.10440I$	$-7.56449+2.31310I$
$u=-0.618158+0.162095I$ $a=0.81252+1.47630I$ $b=0.266464-0.032773I$	$-1.35954-2.62834I$	$-9.01490+3.76676I$
$u=-0.618158-0.162095I$ $a=0.81252-1.47630I$ $b=0.266464+0.032773I$	$-1.35954+2.62834I$	$-9.01490-3.76676I$
$u=-0.427624+1.306800I$ $a=1.316570+0.287086I$ $b=-2.05986-0.58492I$	$6.77585+6.29606I$	0
$u=-0.427624-1.306800I$ $a=1.316570-0.287086I$ $b=-2.05986+0.58492I$	$6.77585-6.29606I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.540765 + 0.298006I$ $a = 1.21617 + 1.81557I$ $b = -1.173460 - 0.320334I$	$-8.36689 - 3.37214I$	$-6.78658 + 1.79216I$
$u = 0.540765 - 0.298006I$ $a = 1.21617 - 1.81557I$ $b = -1.173460 + 0.320334I$	$-8.36689 + 3.37214I$	$-6.78658 - 1.79216I$
$u = 0.565613$ $a = -1.21094$ $b = 0.0986015$	-1.05400	-9.48580
$u = 0.55473 + 1.39062I$ $a = 1.170690 - 0.365984I$ $b = -2.11486 + 0.87983I$	$-5.4571 - 15.1423I$	0
$u = 0.55473 - 1.39062I$ $a = 1.170690 + 0.365984I$ $b = -2.11486 - 0.87983I$	$-5.4571 + 15.1423I$	0
$u = 0.38131 + 1.45291I$ $a = 0.713409 - 0.306037I$ $b = -1.46415 + 0.57342I$	$4.12609 - 3.19316I$	0
$u = 0.38131 - 1.45291I$ $a = 0.713409 + 0.306037I$ $b = -1.46415 - 0.57342I$	$4.12609 + 3.19316I$	0
$u = 0.51803 + 1.42333I$ $a = -0.910861 + 0.309333I$ $b = 1.80097 - 0.72599I$	$3.42580 - 9.91933I$	0
$u = 0.51803 - 1.42333I$ $a = -0.910861 - 0.309333I$ $b = 1.80097 + 0.72599I$	$3.42580 + 9.91933I$	0
$u = -0.55233 + 1.42025I$ $a = -0.872585 - 0.293555I$ $b = 1.270760 + 0.462620I$	$5.06769 + 4.73436I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.55233-1.42025I$ $a=-0.872585+0.293555I$ $b=\ \ 1.270760-0.462620I$	$5.06769-4.73436I$	0
$u=-0.150198+0.275358I$ $a=-1.53020+0.49740I$ $b=\ \ 0.487442+0.712451I$	$-0.19079-1.54094I$	$-2.12423+2.96705I$
$u=-0.150198-0.275358I$ $a=-1.53020-0.49740I$ $b=\ \ 0.487442-0.712451I$	$-0.19079+1.54094I$	$-2.12423-2.96705I$
$u=\ \ 0.84030+1.60146I$ $a=-0.248588-0.091885I$ $b=\ \ 0.286209+0.417616I$	$-5.54252+2.13223I$	0
$u=\ \ 0.84030-1.60146I$ $a=-0.248588+0.091885I$ $b=\ \ 0.286209-0.417616I$	$-5.54252-2.13223I$	0
$u=-0.10374+1.81764I$ $a=-0.162358+0.545197I$ $b=\ \ 0.343904-0.804109I$	$-5.52482+1.18551I$	0
$u=-0.10374-1.81764I$ $a=-0.162358-0.545197I$ $b=\ \ 0.343904+0.804109I$	$-5.52482-1.18551I$	0

II. $I_2^u = \langle -15113u^{17} - 4096u^{16} + \cdots + 48267b + 50891,\ -57716u^{17} - 93541u^{16} + \cdots + 48267a - 66022,\ u^{18} + u^{17} + \cdots - 2u + 1\rangle$

(i) Arc colorings

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

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

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

$$a_4 = \begin{pmatrix} 1.19577u^{17} + 1.93799u^{16} + \cdots + 10.2808u + 1.36785 \\ 0.313112u^{17} + 0.0848613u^{16} + \cdots + 4.67019u - 1.05436 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 1.18369u^{17} + 2.40398u^{16} + \cdots + 10.7617u + 1.88182 \\ 0.325191u^{17} - 0.381130u^{16} + \cdots + 4.18926u - 1.56834 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.31137u^{17} + 2.05938u^{16} + \cdots + 14.6623u + 1.05571 \\ 0.463401u^{17} + 0.142665u^{16} + \cdots + 4.56614u - 1.06014 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2.41569u^{17} + 2.94400u^{16} + \cdots + 11.5997u + 3.70775 \\ -1.22525u^{17} - 1.72683u^{16} + \cdots + 2.12120u + 0.246877 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.10968u^{17} - 2.46319u^{16} + \cdots - 3.71177u + 1.43736 \\ -1.01954u^{17} + 0.0710630u^{16} + \cdots - 5.12433u + 2.98573 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.26256u^{17} - 0.630348u^{16} + \cdots - 10.0123u - 0.143058 \\ 1.38287u^{17} + 0.606315u^{16} + \cdots + 3.73659u - 2.21655 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.336669u^{17} - 0.784490u^{16} + \cdots - 1.40154u + 0.205689 \\ -1.59461u^{17} - 0.706777u^{16} + \cdots - 4.69698u + 2.60903 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1.58433u^{17} + 0.984876u^{16} + \cdots + 9.50751u - 3.95906 \\ -0.464023u^{17} - 1.00891u^{16} + \cdots + 0.216753u - 1.40054 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{90767}{16089}u^{17} - \frac{105175}{16089}u^{16} + \cdots - \frac{268616}{16089}u - \frac{63094}{16089}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 20u^{17} + \cdots - 74u + 9$
c_2	$u^{18} + 2u^{17} + \cdots + 10u + 3$
c_3	$u^{18} + 8u^{16} + \cdots - 3u + 9$
c_4	$u^{18} - 2u^{17} + \cdots - 5u + 1$
c_5	$u^{18} - 2u^{17} + \cdots - 10u + 3$
c_6	$u^{18} - 2u^{17} + \cdots - 5u + 3$
c_7	$u^{18} + u^{17} + \cdots - 2u + 1$
c_8	$u^{18} + 8u^{16} + \cdots + 3u + 9$
c_9	$u^{18} + u^{17} + \cdots + u + 1$
c_{10}	$u^{18} + u^{17} + \cdots - 7u + 3$
c_{11}	$u^{18} - u^{17} + \cdots + 2u + 1$
c_{12}	$u^{18} - 5u^{17} + \cdots + 15u + 9$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} - 36y^{17} + \cdots + 1454y + 81$
c_2, c_5	$y^{18} + 20y^{17} + \cdots + 74y + 9$
c_3, c_8	$y^{18} + 16y^{17} + \cdots + 1035y + 81$
c_4	$y^{18} - 4y^{17} + \cdots - 7y + 1$
c_6	$y^{18} + 20y^{17} + \cdots + 131y + 9$
c_7, c_{11}	$y^{18} + 17y^{17} + \cdots + 22y + 1$
c_9	$y^{18} + 11y^{17} + \cdots - 9y + 1$
c_{10}	$y^{18} + 7y^{17} + \cdots + 53y + 9$
c_{12}	$y^{18} - 15y^{17} + \cdots + 495y + 81$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.955128+0.028468I$ $a=-0.470624+0.928452I$ $b=-0.378740-0.352785I$	$1.45067+2.23926I$	$-5.74852-4.22019I$
$u=-0.955128-0.028468I$ $a=-0.470624-0.928452I$ $b=-0.378740+0.352785I$	$1.45067-2.23926I$	$-5.74852+4.22019I$
$u=0.588467+0.644672I$ $a=0.004247+0.886743I$ $b=-0.771830-0.597373I$	$-0.77892-2.83224I$	$-2.15898+10.71484I$
$u=0.588467-0.644672I$ $a=0.004247-0.886743I$ $b=-0.771830+0.597373I$	$-0.77892+2.83224I$	$-2.15898-10.71484I$
$u=0.157250+1.129630I$ $a=0.747231+0.158603I$ $b=-2.20016+0.80914I$	$2.38693-3.66478I$	$3.78363+3.00827I$
$u=0.157250-1.129630I$ $a=0.747231-0.158603I$ $b=-2.20016-0.80914I$	$2.38693+3.66478I$	$3.78363-3.00827I$
$u=-0.104673+1.160730I$ $a=-0.526573-0.204291I$ $b=1.35939-1.31112I$	$4.61635+1.06986I$	$5.50666-5.36656I$
$u=-0.104673-1.160730I$ $a=-0.526573+0.204291I$ $b=1.35939+1.31112I$	$4.61635-1.06986I$	$5.50666+5.36656I$
$u=0.193538+0.774845I$ $a=-1.28604-2.17413I$ $b=2.12934+1.50102I$	$-8.58566-3.82241I$	$-7.48775+7.44013I$
$u=0.193538-0.774845I$ $a=-1.28604+2.17413I$ $b=2.12934-1.50102I$	$-8.58566+3.82241I$	$-7.48775-7.44013I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.53247+1.34251I$ $a=\ \ 1.188420+0.044021I$ $b=-1.97913-0.43683I$	$5.61740+7.69065I$	$-2.00686-6.54591I$
$u=-0.53247-1.34251I$ $a=\ \ 1.188420-0.044021I$ $b=-1.97913+0.43683I$	$5.61740-7.69065I$	$-2.00686+6.54591I$
$u=-0.38473+1.43619I$ $a=-0.912804-0.458239I$ $b=\ \ 1.56484+0.58036I$	$6.11112+4.38817I$	$1.91777-2.70230I$
$u=-0.38473-1.43619I$ $a=-0.912804+0.458239I$ $b=\ \ 1.56484-0.58036I$	$6.11112-4.38817I$	$1.91777+2.70230I$
$u=\ \ 0.109990+0.279939I$ $a=\ \ 0.67048+2.80242I$ $b=-0.062626+0.797311I$	$-0.15418+2.05102I$	$-3.58795-2.95582I$
$u=\ \ 0.109990-0.279939I$ $a=\ \ 0.67048-2.80242I$ $b=-0.062626-0.797311I$	$-0.15418-2.05102I$	$-3.58795+2.95582I$
$u=\ \ 0.42776+1.69552I$ $a=-0.414340+0.265180I$ $b=\ \ 0.338917-0.418197I$	$-5.72891+1.72338I$	$-11.71800-0.30191I$
$u=\ \ 0.42776-1.69552I$ $a=-0.414340-0.265180I$ $b=\ \ 0.338917+0.418197I$	$-5.72891-1.72338I$	$-11.71800+0.30191I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-20u^{17}+\cdots-74u+9)(u^{57}+75u^{56}+\cdots-178u-1)$
c_2	$(u^{18}+2u^{17}+\cdots+10u+3)(u^{57}-u^{56}+\cdots-16u+1)$
c_3	$(u^{18}+8u^{16}+\cdots-3u+9)(u^{57}-u^{56}+\cdots-493u+451)$
c_4	$(u^{18}-2u^{17}+\cdots-5u+1)(u^{57}+3u^{56}+\cdots-7u+3)$
c_5	$(u^{18}-2u^{17}+\cdots-10u+3)(u^{57}-u^{56}+\cdots-16u+1)$
c_6	$(u^{18}-2u^{17}+\cdots-5u+3)(u^{57}+u^{56}+\cdots+117087u+163159)$
c_7	$(u^{18}+u^{17}+\cdots-2u+1)(u^{57}+4u^{56}+\cdots-62u+21)$
c_8	$(u^{18}+8u^{16}+\cdots+3u+9)(u^{57}-u^{56}+\cdots-493u+451)$
c_9	$(u^{18}+u^{17}+\cdots+u+1)(u^{57}-2u^{56}+\cdots+1465u+32979)$
c_{10}	$(u^{18}+u^{17}+\cdots-7u+3)(u^{57}+7u^{55}+\cdots+397u+97)$
c_{11}	$(u^{18}-u^{17}+\cdots+2u+1)(u^{57}+4u^{56}+\cdots-62u+21)$
c_{12}	$(u^{18}-5u^{17}+\cdots+15u+9)(u^{57}-14u^{56}+\cdots+669u+151)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}-36y^{17}+\cdots+1454y+81)(y^{57}-177y^{56}+\cdots+14174y-1)$
c_2, c_5	$(y^{18}+20y^{17}+\cdots+74y+9)(y^{57}+75y^{56}+\cdots-178y-1)$
c_3, c_8	$(y^{18}+16y^{17}+\cdots+1035y+81)$ $\cdot(y^{57}+31y^{56}+\cdots-4225459y-203401)$
c_4	$(y^{18}-4y^{17}+\cdots-7y+1)(y^{57}-9y^{56}+\cdots+91y-9)$
c_6	$(y^{18}+20y^{17}+\cdots+131y+9)$ $\cdot(y^{57}+107y^{56}+\cdots-82651034559y-26620859281)$
c_7, c_{11}	$(y^{18}+17y^{17}+\cdots+22y+1)(y^{57}+44y^{56}+\cdots-6698y-441)$
c_9	$(y^{18}+11y^{17}+\cdots-9y+1)$ $\cdot(y^{57}+78y^{56}+\cdots+20424721765y-1087614441)$
c_{10}	$(y^{18}+7y^{17}+\cdots+53y+9)(y^{57}+14y^{56}+\cdots-194501y-9409)$
c_{12}	$(y^{18}-15y^{17}+\cdots+495y+81)$ $\cdot(y^{57}-40y^{56}+\cdots+3746609y-22801)$