$12a_{0412}$ $(K12a_{0412})$

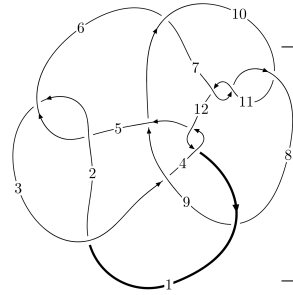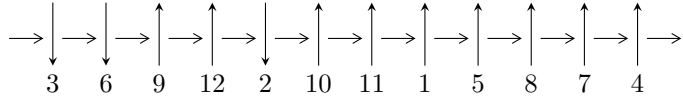**Linearized knot diagam**

A knot diagram[1]

Solving Sequence

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

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

$$I_1^u = \langle 4.20170 \times 10^{176} u^{104} - 3.69872 \times 10^{177} u^{103} + \cdots + 1.98967 \times 10^{177} b - 1.56965 \times 10^{177},$$
$$- 1.93657 \times 10^{177} u^{104} + 3.13804 \times 10^{178} u^{103} + \cdots + 2.18864 \times 10^{178} a - 3.72446 \times 10^{178},$$
$$u^{105} - 7u^{104} + \cdots + 3u + 1\rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 105 representations.

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[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. $I_1^u = \langle 4.20 \times 10^{176}u^{104} - 3.70 \times 10^{177}u^{103} + \cdots + 1.99 \times 10^{177}b - 1.57 \times 10^{177}, \ -1.94 \times 10^{177}u^{104} + 3.14 \times 10^{178}u^{103} + \cdots + 2.19 \times 10^{178}a - 3.72 \times 10^{178}, \ u^{105} - 7u^{104} + \cdots + 3u + 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 0.0884829u^{104} - 1.43379u^{103} + \cdots + 0.687210u + 1.70173 \\ -0.211175u^{104} + 1.85896u^{103} + \cdots + 0.342478u + 0.788902 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.165696u^{104} - 0.198162u^{103} + \cdots - 5.72062u - 1.82003 \\ 0.0402541u^{104} - 0.944412u^{103} + \cdots - 2.78766u - 0.617942 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^2 + 1 \\ -u^4 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.15833u^{104} - 14.1242u^{103} + \cdots - 2.59855u + 0.506586 \\ 1.85867u^{104} - 10.8314u^{103} + \cdots - 2.94328u - 0.406239 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1.13726u^{104} - 6.38343u^{103} + \cdots - 8.00594u - 2.72657 \\ 0.380524u^{104} - 2.29143u^{103} + \cdots + 3.83633u + 0.123900 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 2.25309u^{104} - 14.9010u^{103} + \cdots - 2.19648u - 0.0146111 \\ 1.96367u^{104} - 11.9280u^{103} + \cdots - 5.85996u - 0.890655 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1.97598u^{104} - 11.9594u^{103} + \cdots - 9.62283u - 1.09953 \\ 2.39398u^{104} - 15.0162u^{103} + \cdots - 6.27032u - 2.03812 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.58757u^{104} - 9.31152u^{103} + \cdots + 0.980426u + 1.41068 \\ 1.26723u^{104} - 7.07029u^{103} + \cdots - 0.922253u - 0.284019 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 5.01196u^{104} - 31.9283u^{103} + \cdots - 6.46734u + 9.94137$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{105} + 41u^{104} + \cdots + 13u + 1$
c_2, c_5	$u^{105} + 7u^{104} + \cdots + 3u - 1$
c_3	$u^{105} - u^{104} + \cdots - 3u - 1$
c_4, c_{12}	$u^{105} + 7u^{104} + \cdots + 3u - 1$
c_6	$u^{105} - u^{104} + \cdots + 625275u - 85457$
c_7, c_{10}, c_{11}	$u^{105} + u^{104} + \cdots + u - 1$
c_8	$u^{105} + 3u^{104} + \cdots - 31u - 3$
c_9	$u^{105} + u^{104} + \cdots + 413u - 2359$

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(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{105} + 47y^{104} + \cdots + 245y - 1$
c_2, c_5	$y^{105} - 41y^{104} + \cdots + 13y - 1$
c_3	$y^{105} + 7y^{104} + \cdots + 69y - 1$
c_4, c_{12}	$y^{105} + 67y^{104} + \cdots + 13y - 1$
c_6	$y^{105} - 25y^{104} + \cdots + 228484645933y - 7302898849$
c_7, c_{10}, c_{11}	$y^{105} + 91y^{104} + \cdots + 45y - 1$
c_8	$y^{105} + 231y^{104} + \cdots - 3743y - 9$
c_9	$y^{105} - 209y^{104} + \cdots + 318380797y - 5564881$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.784644 + 0.598937I$ $a = 2.25636 - 0.88903I$ $b = 1.36159 - 1.31807I$	$1.85369 - 0.14305I$	0
$u = -0.784644 - 0.598937I$ $a = 2.25636 + 0.88903I$ $b = 1.36159 + 1.31807I$	$1.85369 + 0.14305I$	0
$u = -0.858240 + 0.539535I$ $a = 7.28815 + 2.86509I$ $b = 6.10302 - 5.61999I$	$-4.68800 - 0.72454I$	0
$u = -0.858240 - 0.539535I$ $a = 7.28815 - 2.86509I$ $b = 6.10302 + 5.61999I$	$-4.68800 + 0.72454I$	0
$u = 0.564992 + 0.806358I$ $a = -0.88945 - 1.11350I$ $b = 0.24954 - 1.51542I$	$-0.43187 + 4.02094I$	0
$u = 0.564992 - 0.806358I$ $a = -0.88945 + 1.11350I$ $b = 0.24954 + 1.51542I$	$-0.43187 - 4.02094I$	0
$u = -0.881792 + 0.510724I$ $a = -10.51730 + 2.00682I$ $b = -3.80678 + 10.52150I$	$-0.56771 + 2.03241I$	0
$u = -0.881792 - 0.510724I$ $a = -10.51730 - 2.00682I$ $b = -3.80678 - 10.52150I$	$-0.56771 - 2.03241I$	0
$u = 0.387986 + 0.950406I$ $a = 0.482022 - 0.428068I$ $b = 0.468486 + 0.163848I$	$0.84097 - 3.95845I$	0
$u = 0.387986 - 0.950406I$ $a = 0.482022 + 0.428068I$ $b = 0.468486 - 0.163848I$	$0.84097 + 3.95845I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.913124 + 0.476644I$		
$a = \quad 4.58490 - 3.63846I$	$-4.71244 + 4.76569I$	0
$b = -0.09300 - 6.06609I$		
$u = -0.913124 - 0.476644I$		
$a = \quad 4.58490 + 3.63846I$	$-4.71244 - 4.76569I$	0
$b = -0.09300 + 6.06609I$		
$u = \quad 0.839840 + 0.597226I$		
$a = -1.246410 + 0.445955I$	$2.38346 - 2.36277I$	0
$b = -0.759419 + 0.644703I$		
$u = \quad 0.839840 - 0.597226I$		
$a = -1.246410 - 0.445955I$	$2.38346 + 2.36277I$	0
$b = -0.759419 - 0.644703I$		
$u = \quad 0.850571 + 0.587804I$		
$a = -0.605447 + 0.275364I$	$2.36909 - 2.33534I$	0
$b = -0.121760 + 0.829135I$		
$u = \quad 0.850571 - 0.587804I$		
$a = -0.605447 - 0.275364I$	$2.36909 + 2.33534I$	0
$b = -0.121760 - 0.829135I$		
$u = \quad 0.542109 + 0.888877I$		
$a = \quad 0.989633 + 0.984793I$	$1.65020 + 8.48448I$	0
$b = -0.40355 + 1.51977I$		
$u = \quad 0.542109 - 0.888877I$		
$a = \quad 0.989633 - 0.984793I$	$1.65020 - 8.48448I$	0
$b = -0.40355 - 1.51977I$		
$u = \quad 0.987126 + 0.357010I$		
$a = \quad 0.172002 - 0.826380I$	$-5.21470 - 0.78396I$	0
$b = \quad 1.364530 - 0.094449I$		
$u = \quad 0.987126 - 0.357010I$		
$a = \quad 0.172002 + 0.826380I$	$-5.21470 + 0.78396I$	0
$b = \quad 1.364530 + 0.094449I$		

Solutions to I_1^u		$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.715044 + 0.618340I$		
$a =$	$-0.20679 - 1.46973I$	$-0.37710 + 2.65093I$	0
$b =$	$0.09366 - 1.70389I$		
$u =$	$0.715044 - 0.618340I$		
$a =$	$-0.20679 + 1.46973I$	$-0.37710 - 2.65093I$	0
$b =$	$0.09366 + 1.70389I$		
$u =$	$0.513664 + 0.931812I$		
$a =$	$-1.057000 - 0.935885I$	$-3.58129 + 12.58550I$	0
$b =$	$0.50411 - 1.49044I$		
$u =$	$0.513664 - 0.931812I$		
$a =$	$-1.057000 + 0.935885I$	$-3.58129 - 12.58550I$	0
$b =$	$0.50411 + 1.49044I$		
$u =$	$-0.648758 + 0.845940I$		
$a =$	$0.890042 - 0.645854I$	$2.52519 + 1.13520I$	0
$b =$	$0.009504 - 1.305990I$		
$u =$	$-0.648758 - 0.845940I$		
$a =$	$0.890042 + 0.645854I$	$2.52519 - 1.13520I$	0
$b =$	$0.009504 + 1.305990I$		
$u =$	$-0.733179 + 0.561323I$		
$a =$	$1.41999 - 0.77213I$	$1.39941 + 0.38540I$	0
$b =$	$0.74850 - 1.44176I$		
$u =$	$-0.733179 - 0.561323I$		
$a =$	$1.41999 + 0.77213I$	$1.39941 - 0.38540I$	0
$b =$	$0.74850 + 1.44176I$		
$u =$	$-0.552779 + 0.925006I$		
$a =$	$-0.823336 + 0.551394I$	$5.43319 - 2.63646I$	0
$b =$	$0.127984 + 1.085750I$		
$u =$	$-0.552779 - 0.925006I$		
$a =$	$-0.823336 - 0.551394I$	$5.43319 + 2.63646I$	0
$b =$	$0.127984 - 1.085750I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.891298 + 0.610073I$ $a = -0.99689 + 1.67821I$ $b = -0.53902 + 2.37842I$	$1.52100 + 4.93000I$	0
$u = -0.891298 - 0.610073I$ $a = -0.99689 - 1.67821I$ $b = -0.53902 - 2.37842I$	$1.52100 - 4.93000I$	0
$u = \ \ \ 0.719718 + 0.566081I$ $a = \ \ \ 0.971659 + 0.472938I$ $b = -0.066367 - 0.169388I$	$-1.45824 + 1.82741I$	0
$u = \ \ \ 0.719718 - 0.566081I$ $a = \ \ \ 0.971659 - 0.472938I$ $b = -0.066367 + 0.169388I$	$-1.45824 - 1.82741I$	0
$u = -0.489338 + 0.987991I$ $a = \ \ \ 0.773874 - 0.512163I$ $b = -0.225468 - 0.939865I$	$0.79628 - 6.39354I$	0
$u = -0.489338 - 0.987991I$ $a = \ \ \ 0.773874 + 0.512163I$ $b = -0.225468 + 0.939865I$	$0.79628 + 6.39354I$	0
$u = \ \ \ 0.939075 + 0.580606I$ $a = \ \ \ 0.0878441 - 0.0304630I$ $b = -0.480576 - 0.945992I$	$-2.14023 - 6.43595I$	0
$u = \ \ \ 0.939075 - 0.580606I$ $a = \ \ \ 0.0878441 + 0.0304630I$ $b = -0.480576 + 0.945992I$	$-2.14023 + 6.43595I$	0
$u = -1.105020 + 0.003986I$ $a = -0.463514 + 0.579517I$ $b = -0.081000 - 0.445193I$	$-6.23158 - 2.80589I$	0
$u = -1.105020 - 0.003986I$ $a = -0.463514 - 0.579517I$ $b = -0.081000 + 0.445193I$	$-6.23158 + 2.80589I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.930889 + 0.606222I$ $a = -1.55877 + 0.85888I$ $b = -0.88224 + 1.58561I$	$0.76571 + 4.31173I$	0
$u = -0.930889 - 0.606222I$ $a = -1.55877 - 0.85888I$ $b = -0.88224 - 1.58561I$	$0.76571 - 4.31173I$	0
$u = 0.928998 + 0.618976I$ $a = 2.04545 + 0.23803I$ $b = 1.58004 + 0.66760I$	$-1.01275 - 7.53557I$	0
$u = 0.928998 - 0.618976I$ $a = 2.04545 - 0.23803I$ $b = 1.58004 - 0.66760I$	$-1.01275 + 7.53557I$	0
$u = 0.108711 + 0.871393I$ $a = -0.513219 + 0.308942I$ $b = -0.280446 + 0.170757I$	$-2.21809 - 1.17141I$	0
$u = 0.108711 - 0.871393I$ $a = -0.513219 - 0.308942I$ $b = -0.280446 - 0.170757I$	$-2.21809 + 1.17141I$	0
$u = 0.748138 + 0.456711I$ $a = -0.454893 + 1.287700I$ $b = -1.47842 + 0.24559I$	$-1.42263 - 2.10421I$	0
$u = 0.748138 - 0.456711I$ $a = -0.454893 - 1.287700I$ $b = -1.47842 - 0.24559I$	$-1.42263 + 2.10421I$	0
$u = 1.113190 + 0.197962I$ $a = 0.203752 + 0.323619I$ $b = 0.092885 - 0.183534I$	$-2.01882 - 1.15814I$	0
$u = 1.113190 - 0.197962I$ $a = 0.203752 - 0.323619I$ $b = 0.092885 + 0.183534I$	$-2.01882 + 1.15814I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.804192 + 0.313985I$ $a = -2.00216 + 0.54358I$ $b = -1.58425 + 1.27138I$	$-3.99118 - 2.00596I$	0
$u = -0.804192 - 0.313985I$ $a = -2.00216 - 0.54358I$ $b = -1.58425 - 1.27138I$	$-3.99118 + 2.00596I$	0
$u = 0.855335 + 0.112245I$ $a = 0.80652 + 1.60498I$ $b = 1.62206 + 1.22184I$	$-7.40410 + 4.25720I$	0
$u = 0.855335 - 0.112245I$ $a = 0.80652 - 1.60498I$ $b = 1.62206 - 1.22184I$	$-7.40410 - 4.25720I$	0
$u = -0.974317 + 0.592288I$ $a = 0.27144 - 1.61288I$ $b = 0.01068 - 2.47838I$	$-4.69892 + 9.33676I$	0
$u = -0.974317 - 0.592288I$ $a = 0.27144 + 1.61288I$ $b = 0.01068 + 2.47838I$	$-4.69892 - 9.33676I$	0
$u = -0.635040 + 0.567354I$ $a = -2.48560 + 0.33455I$ $b = -1.101240 + 0.509213I$	$-3.69404 - 4.64409I$	0
$u = -0.635040 - 0.567354I$ $a = -2.48560 - 0.33455I$ $b = -1.101240 - 0.509213I$	$-3.69404 + 4.64409I$	0
$u = 0.476371 + 1.053510I$ $a = -0.507456 + 0.437799I$ $b = -0.474779 - 0.347760I$	$-3.81811 - 7.20822I$	0
$u = 0.476371 - 1.053510I$ $a = -0.507456 - 0.437799I$ $b = -0.474779 + 0.347760I$	$-3.81811 + 7.20822I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.155890 + 0.151746I$ $a = 0.508318 - 0.111207I$ $b = 0.032423 + 0.975592I$	$-13.01170 - 1.06028I$	0
$u = -1.155890 - 0.151746I$ $a = 0.508318 + 0.111207I$ $b = 0.032423 - 0.975592I$	$-13.01170 + 1.06028I$	0
$u = -1.079920 + 0.483105I$ $a = 1.05608 - 1.02881I$ $b = 0.67251 - 1.36232I$	$-5.45759 + 5.13104I$	0
$u = -1.079920 - 0.483105I$ $a = 1.05608 + 1.02881I$ $b = 0.67251 + 1.36232I$	$-5.45759 - 5.13104I$	0
$u = 1.099770 + 0.484541I$ $a = 0.561303 + 0.185309I$ $b = 0.372907 + 0.221075I$	$-2.01746 - 1.41013I$	0
$u = 1.099770 - 0.484541I$ $a = 0.561303 - 0.185309I$ $b = 0.372907 - 0.221075I$	$-2.01746 + 1.41013I$	0
$u = -1.209830 + 0.064571I$ $a = 0.106577 + 0.547653I$ $b = -0.339099 - 0.297583I$	$-5.02520 + 6.71923I$	0
$u = -1.209830 - 0.064571I$ $a = 0.106577 - 0.547653I$ $b = -0.339099 + 0.297583I$	$-5.02520 - 6.71923I$	0
$u = 1.070970 + 0.573366I$ $a = -1.93630 - 0.77675I$ $b = -1.95721 - 1.69398I$	$-10.33900 - 8.37585I$	0
$u = 1.070970 - 0.573366I$ $a = -1.93630 + 0.77675I$ $b = -1.95721 + 1.69398I$	$-10.33900 + 8.37585I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.331960 + 0.691775I$		
$a = 1.36501 + 1.42750I$	$-8.31773 + 3.57839I$	$0.49395 - 2.97375I$
$b = -0.088717 + 1.079180I$		
$u = 0.331960 - 0.691775I$		
$a = 1.36501 - 1.42750I$	$-8.31773 - 3.57839I$	$0.49395 + 2.97375I$
$b = -0.088717 - 1.079180I$		
$u = -1.028750 + 0.688724I$		
$a = -1.39282 + 0.64457I$	$1.34242 + 4.57879I$	0
$b = -0.88861 + 1.57623I$		
$u = -1.028750 - 0.688724I$		
$a = -1.39282 - 0.64457I$	$1.34242 - 4.57879I$	0
$b = -0.88861 - 1.57623I$		
$u = 1.061750 + 0.666652I$		
$a = 1.85225 + 0.61655I$	$-1.93050 - 9.56236I$	0
$b = 1.48698 + 1.73016I$		
$u = 1.061750 - 0.666652I$		
$a = 1.85225 - 0.61655I$	$-1.93050 + 9.56236I$	0
$b = 1.48698 - 1.73016I$		
$u = 0.851397 + 0.934773I$		
$a = 0.585957 - 0.403561I$	$-5.23518 - 0.97848I$	0
$b = 0.883007 + 0.461434I$		
$u = 0.851397 - 0.934773I$		
$a = 0.585957 + 0.403561I$	$-5.23518 + 0.97848I$	0
$b = 0.883007 - 0.461434I$		
$u = -1.279860 + 0.048073I$		
$a = -0.013258 - 0.408102I$	$-10.4637 + 10.2771I$	0
$b = 0.563062 + 0.424866I$		
$u = -1.279860 - 0.048073I$		
$a = -0.013258 + 0.408102I$	$-10.4637 - 10.2771I$	0
$b = 0.563062 - 0.424866I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.026340 + 0.782336I$		
$a = -0.648271 + 0.252540I$	$-1.47950 - 3.15939I$	0
$b = -0.903269 - 0.402288I$		
$u = 1.026340 - 0.782336I$		
$a = -0.648271 - 0.252540I$	$-1.47950 + 3.15939I$	0
$b = -0.903269 + 0.402288I$		
$u = 1.096650 + 0.689552I$		
$a = -1.80294 - 0.63195I$	$-0.0438 - 14.3168I$	0
$b = -1.43879 - 1.94992I$		
$u = 1.096650 - 0.689552I$		
$a = -1.80294 + 0.63195I$	$-0.0438 + 14.3168I$	0
$b = -1.43879 + 1.94992I$		
$u = -1.100720 + 0.704461I$		
$a = 1.281180 - 0.579729I$	$3.74576 + 8.60988I$	0
$b = 0.96217 - 1.58767I$		
$u = -1.100720 - 0.704461I$		
$a = 1.281180 + 0.579729I$	$3.74576 - 8.60988I$	0
$b = 0.96217 + 1.58767I$		
$u = 1.123730 + 0.693230I$		
$a = 1.78117 + 0.64669I$	$-5.4572 - 18.5419I$	0
$b = 1.47918 + 2.08470I$		
$u = 1.123730 - 0.693230I$		
$a = 1.78117 - 0.64669I$	$-5.4572 + 18.5419I$	0
$b = 1.47918 - 2.08470I$		
$u = -1.145170 + 0.703645I$		
$a = -1.216640 + 0.551669I$	$-1.22739 + 12.51770I$	0
$b = -1.02688 + 1.57913I$		
$u = -1.145170 - 0.703645I$		
$a = -1.216640 - 0.551669I$	$-1.22739 - 12.51770I$	0
$b = -1.02688 - 1.57913I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.357540 + 0.184763I$		
$a = -0.140088 - 0.106922I$	$-6.88882 - 3.53968I$	0
$b = -0.217060 + 0.411317I$		
$u = 1.357540 - 0.184763I$		
$a = -0.140088 + 0.106922I$	$-6.88882 + 3.53968I$	0
$b = -0.217060 - 0.411317I$		
$u = 1.285270 + 0.572998I$		
$a = -0.429502 + 0.031586I$	$-6.66935 + 0.80668I$	0
$b = -0.707482 + 0.030623I$		
$u = 1.285270 - 0.572998I$		
$a = -0.429502 - 0.031586I$	$-6.66935 - 0.80668I$	0
$b = -0.707482 - 0.030623I$		
$u = 0.516771 + 0.279860I$		
$a = 0.104453 + 1.197220I$	$-1.45581 - 2.03254I$	$1.98699 + 4.69397I$
$b = -1.045920 + 0.531522I$		
$u = 0.516771 - 0.279860I$		
$a = 0.104453 - 1.197220I$	$-1.45581 + 2.03254I$	$1.98699 - 4.69397I$
$b = -1.045920 - 0.531522I$		
$u = 1.148910 + 0.824600I$		
$a = 0.547230 - 0.223458I$	$-6.17233 - 5.96120I$	0
$b = 0.971811 + 0.306781I$		
$u = 1.148910 - 0.824600I$		
$a = 0.547230 + 0.223458I$	$-6.17233 + 5.96120I$	0
$b = 0.971811 - 0.306781I$		
$u = -0.393907 + 0.222200I$		
$a = -2.31125 - 2.68310I$	$-4.27194 + 4.28516I$	$-0.73417 - 1.61280I$
$b = -1.094040 + 0.870164I$		
$u = -0.393907 - 0.222200I$		
$a = -2.31125 + 2.68310I$	$-4.27194 - 4.28516I$	$-0.73417 + 1.61280I$
$b = -1.094040 - 0.870164I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.062800 + 0.374522I$		
$a = -1.00837 - 1.66128I$	$-2.90409 - 2.08093I$	$3.46783 + 4.41904I$
$b = -0.164422 + 0.714048I$		
$u = 0.062800 - 0.374522I$		
$a = -1.00837 + 1.66128I$	$-2.90409 + 2.08093I$	$3.46783 - 4.41904I$
$b = -0.164422 - 0.714048I$		
$u = -0.107754 + 0.232769I$		
$a = 0.65259 + 3.66655I$	$0.279130 + 0.757424I$	$6.19556 - 0.41609I$
$b = 0.687564 - 0.832329I$		
$u = -0.107754 - 0.232769I$		
$a = 0.65259 - 3.66655I$	$0.279130 - 0.757424I$	$6.19556 + 0.41609I$
$b = 0.687564 + 0.832329I$		
$u = -0.240618$		
$a = 2.16389$	0.744592	13.6290
$b = 0.603280$		

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^{105} + 41u^{104} + \cdots + 13u + 1$
c_2, c_5	$u^{105} + 7u^{104} + \cdots + 3u - 1$
c_3	$u^{105} - u^{104} + \cdots - 3u - 1$
c_4, c_{12}	$u^{105} + 7u^{104} + \cdots + 3u - 1$
c_6	$u^{105} - u^{104} + \cdots + 625275u - 85457$
c_7, c_{10}, c_{11}	$u^{105} + u^{104} + \cdots + u - 1$
c_8	$u^{105} + 3u^{104} + \cdots - 31u - 3$
c_9	$u^{105} + u^{104} + \cdots + 413u - 2359$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^{105} + 47y^{104} + \cdots + 245y - 1$
c_2, c_5	$y^{105} - 41y^{104} + \cdots + 13y - 1$
c_3	$y^{105} + 7y^{104} + \cdots + 69y - 1$
c_4, c_{12}	$y^{105} + 67y^{104} + \cdots + 13y - 1$
c_6	$y^{105} - 25y^{104} + \cdots + 228484645933y - 7302898849$
c_7, c_{10}, c_{11}	$y^{105} + 91y^{104} + \cdots + 45y - 1$
c_8	$y^{105} + 231y^{104} + \cdots - 3743y - 9$
c_9	$y^{105} - 209y^{104} + \cdots + 318380797y - 5564881$