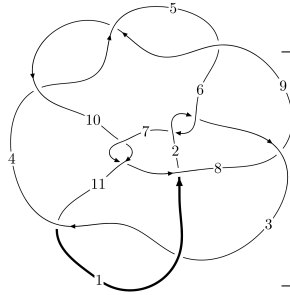
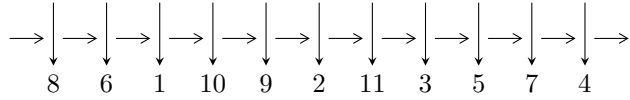


11a₃₂₀ (K11a₃₂₀)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -5.12599 \times 10^{149} u^{70} + 2.15209 \times 10^{150} u^{69} + \dots + 5.93070 \times 10^{149} b + 5.39933 \times 10^{150}, \\ 8.74134 \times 10^{150} u^{70} - 2.86993 \times 10^{151} u^{69} + \dots + 1.12683 \times 10^{151} a + 2.95601 \times 10^{152}, \\ u^{71} - 4u^{70} + \dots - 82u + 19 \rangle$$

$$I_2^u = \langle -4u^{16} + 17u^{15} + \dots + b - 13, 2u^{16} - 9u^{15} + \dots + a + 9, u^{17} - 3u^{16} + \dots + 3u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 88 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.

$$\mathbf{I. } I_1^u = \langle -5.13 \times 10^{149} u^{70} + 2.15 \times 10^{150} u^{69} + \dots + 5.93 \times 10^{149} b + 5.40 \times 10^{150}, 8.74 \times 10^{150} u^{70} - 2.87 \times 10^{151} u^{69} + \dots + 1.13 \times 10^{151} a + 2.96 \times 10^{152}, u^{71} - 4u^{70} + \dots - 82u + 19 \rangle$$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} -0.775744u^{70} + 2.54690u^{69} + \dots + 40.6903u - 26.2329 \\ 0.864314u^{70} - 3.62872u^{69} + \dots + 57.6823u - 9.10403 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.181619u^{70} - 0.0673367u^{69} + \dots - 185.458u + 42.0713 \\ 0.130604u^{70} - 0.388077u^{69} + \dots - 12.6153u - 0.350324 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0637919u^{70} - 0.858245u^{69} + \dots + 60.8860u - 25.1281 \\ 0.857701u^{70} - 3.68006u^{69} + \dots + 58.0726u - 7.10612 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.0885694u^{70} - 1.08182u^{69} + \dots + 98.3726u - 35.3370 \\ 0.864314u^{70} - 3.62872u^{69} + \dots + 57.6823u - 9.10403 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.680313u^{70} - 1.71230u^{69} + \dots - 22.8206u + 17.1395 \\ 0.0264002u^{70} + 0.0383447u^{69} + \dots - 35.8478u + 8.50989 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0235381u^{70} + 0.0777773u^{69} + \dots + 12.0205u + 5.65632 \\ -0.396807u^{70} + 2.02745u^{69} + \dots - 31.9176u + 9.02563 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.521650u^{70} + 3.14454u^{69} + \dots - 204.598u + 45.3905 \\ 0.309001u^{70} - 0.338161u^{69} + \dots - 72.8831u + 18.8315 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.521650u^{70} + 3.14454u^{69} + \dots - 204.598u + 45.3905 \\ 0.309001u^{70} - 0.338161u^{69} + \dots - 72.8831u + 18.8315 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $1.74408u^{70} - 7.67739u^{69} + \dots + 186.830u - 24.0299$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{71} - u^{70} + \dots - 253u + 121$
c_2, c_6	$u^{71} + 2u^{70} + \dots + 212u + 103$
c_3, c_{11}	$u^{71} - 4u^{70} + \dots - 82u + 19$
c_4, c_5, c_9	$u^{71} + u^{70} + \dots - 9u + 11$
c_7, c_{10}	$u^{71} - 18u^{69} + \dots + 28u + 19$
c_8	$u^{71} + u^{70} + \dots + 75261u + 69721$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{71} + 13y^{70} + \dots - 110473y - 14641$
c_2, c_6	$y^{71} + 52y^{70} + \dots - 123976y - 10609$
c_3, c_{11}	$y^{71} + 48y^{70} + \dots - 4562y - 361$
c_4, c_5, c_9	$y^{71} + 77y^{70} + \dots + 103y - 121$
c_7, c_{10}	$y^{71} - 36y^{70} + \dots + 9258y - 361$
c_8	$y^{71} + 37y^{70} + \dots - 78658032583y - 4861017841$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.047825 + 1.017730I$ $a = -0.341643 - 0.579404I$ $b = 1.69982 + 0.31305I$	$3.38826 - 2.90800I$	0
$u = 0.047825 - 1.017730I$ $a = -0.341643 + 0.579404I$ $b = 1.69982 - 0.31305I$	$3.38826 + 2.90800I$	0
$u = 0.423933 + 0.883947I$ $a = -0.940566 - 0.386865I$ $b = 1.128290 - 0.272503I$	$3.17690 + 1.80430I$	0
$u = 0.423933 - 0.883947I$ $a = -0.940566 + 0.386865I$ $b = 1.128290 + 0.272503I$	$3.17690 - 1.80430I$	0
$u = 0.336740 + 0.978403I$ $a = 0.11372 - 1.77123I$ $b = 1.15954 + 0.90500I$	$3.89503 - 4.72871I$	0
$u = 0.336740 - 0.978403I$ $a = 0.11372 + 1.77123I$ $b = 1.15954 - 0.90500I$	$3.89503 + 4.72871I$	0
$u = -0.754094 + 0.580048I$ $a = -0.547122 - 0.007044I$ $b = 1.096540 + 0.755338I$	$4.98219 - 1.09775I$	0
$u = -0.754094 - 0.580048I$ $a = -0.547122 + 0.007044I$ $b = 1.096540 - 0.755338I$	$4.98219 + 1.09775I$	0
$u = 0.046777 + 1.050160I$ $a = 0.09283 - 2.20296I$ $b = -0.706702 + 0.426522I$	$4.71218 - 0.33668I$	0
$u = 0.046777 - 1.050160I$ $a = 0.09283 + 2.20296I$ $b = -0.706702 - 0.426522I$	$4.71218 + 0.33668I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.942608 + 0.017959I$		
$a = 0.343675 + 0.335171I$	$-0.32112 + 5.84881I$	0
$b = 1.144670 - 0.403404I$		
$u = 0.942608 - 0.017959I$		
$a = 0.343675 - 0.335171I$	$-0.32112 - 5.84881I$	0
$b = 1.144670 + 0.403404I$		
$u = -0.232384 + 1.034920I$		
$a = -0.173815 - 0.997337I$	$2.02658 + 2.02846I$	0
$b = 0.299021 + 0.503997I$		
$u = -0.232384 - 1.034920I$		
$a = -0.173815 + 0.997337I$	$2.02658 - 2.02846I$	0
$b = 0.299021 - 0.503997I$		
$u = 0.200339 + 0.907089I$		
$a = 0.25180 + 1.54170I$	$-0.352598 - 1.166030I$	0
$b = -0.999500 - 0.475840I$		
$u = 0.200339 - 0.907089I$		
$a = 0.25180 - 1.54170I$	$-0.352598 + 1.166030I$	0
$b = -0.999500 + 0.475840I$		
$u = 0.842416 + 0.377347I$		
$a = -1.129690 + 0.265067I$	$8.76103 - 4.23637I$	0
$b = -0.468514 + 0.604687I$		
$u = 0.842416 - 0.377347I$		
$a = -1.129690 - 0.265067I$	$8.76103 + 4.23637I$	0
$b = -0.468514 - 0.604687I$		
$u = -0.353533 + 1.029640I$		
$a = 0.41833 - 1.67791I$	$0.74759 + 4.36932I$	0
$b = -0.972971 + 0.871224I$		
$u = -0.353533 - 1.029640I$		
$a = 0.41833 + 1.67791I$	$0.74759 - 4.36932I$	0
$b = -0.972971 - 0.871224I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.569298 + 0.933529I$		
$a = 0.28166 + 1.90992I$	$6.02225 + 6.08511I$	0
$b = 0.99993 - 1.09682I$		
$u = -0.569298 - 0.933529I$		
$a = 0.28166 - 1.90992I$	$6.02225 - 6.08511I$	0
$b = 0.99993 + 1.09682I$		
$u = 0.048283 + 1.137300I$		
$a = -0.949590 + 0.745505I$	$3.52458 + 2.13444I$	0
$b = 0.988491 - 0.625407I$		
$u = 0.048283 - 1.137300I$		
$a = -0.949590 - 0.745505I$	$3.52458 - 2.13444I$	0
$b = 0.988491 + 0.625407I$		
$u = -1.123150 + 0.278639I$		
$a = 0.341249 - 0.025673I$	$-3.38978 - 0.40278I$	0
$b = 0.965387 + 0.144697I$		
$u = -1.123150 - 0.278639I$		
$a = 0.341249 + 0.025673I$	$-3.38978 + 0.40278I$	0
$b = 0.965387 - 0.144697I$		
$u = -0.134492 + 1.169680I$		
$a = 0.67489 + 1.48395I$	$10.90650 + 5.21367I$	0
$b = 1.082810 - 0.501331I$		
$u = -0.134492 - 1.169680I$		
$a = 0.67489 - 1.48395I$	$10.90650 - 5.21367I$	0
$b = 1.082810 + 0.501331I$		
$u = 0.582442 + 1.060300I$		
$a = 0.724590 - 1.097650I$	$4.88583 - 2.21298I$	0
$b = 0.651275 + 0.464021I$		
$u = 0.582442 - 1.060300I$		
$a = 0.724590 + 1.097650I$	$4.88583 + 2.21298I$	0
$b = 0.651275 - 0.464021I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.327594 + 1.168440I$ $a = -0.53229 + 1.43066I$ $b = 0.321204 - 1.006900I$	$6.37762 - 5.16098I$	0
$u = 0.327594 - 1.168440I$ $a = -0.53229 - 1.43066I$ $b = 0.321204 + 1.006900I$	$6.37762 + 5.16098I$	0
$u = -0.447415 + 1.183120I$ $a = 0.405310 - 1.254470I$ $b = -0.719914 + 0.311279I$	$0.95702 + 2.39465I$	0
$u = -0.447415 - 1.183120I$ $a = 0.405310 + 1.254470I$ $b = -0.719914 - 0.311279I$	$0.95702 - 2.39465I$	0
$u = 1.289830 + 0.094787I$ $a = -0.206069 - 0.147386I$ $b = -1.061290 + 0.595628I$	$7.03255 + 9.09735I$	0
$u = 1.289830 - 0.094787I$ $a = -0.206069 + 0.147386I$ $b = -1.061290 - 0.595628I$	$7.03255 - 9.09735I$	0
$u = -0.574723 + 0.330407I$ $a = -0.538480 + 0.587756I$ $b = -1.118760 + 0.110427I$	$-1.79167 + 1.75090I$	$-12.48087 - 4.54784I$
$u = -0.574723 - 0.330407I$ $a = -0.538480 - 0.587756I$ $b = -1.118760 - 0.110427I$	$-1.79167 - 1.75090I$	$-12.48087 + 4.54784I$
$u = 0.384607 + 1.314120I$ $a = 0.469556 - 1.191940I$ $b = -0.54031 + 1.32564I$	$13.6021 - 8.3409I$	0
$u = 0.384607 - 1.314120I$ $a = 0.469556 + 1.191940I$ $b = -0.54031 - 1.32564I$	$13.6021 + 8.3409I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.271650 + 1.343530I$ $a = 0.82251 + 1.49102I$ $b = -0.977413 - 0.493272I$	$3.76513 - 4.21784I$	0
$u = 0.271650 - 1.343530I$ $a = 0.82251 - 1.49102I$ $b = -0.977413 + 0.493272I$	$3.76513 + 4.21784I$	0
$u = -0.558176 + 1.269410I$ $a = -0.071999 + 1.263220I$ $b = 1.071650 - 0.517844I$	$-0.06369 + 6.26228I$	0
$u = -0.558176 - 1.269410I$ $a = -0.071999 - 1.263220I$ $b = 1.071650 + 0.517844I$	$-0.06369 - 6.26228I$	0
$u = 0.255272 + 0.548146I$ $a = -1.01679 - 1.14079I$ $b = 0.788104 - 0.383173I$	$2.89013 + 1.78350I$	$-4.97596 - 3.66282I$
$u = 0.255272 - 0.548146I$ $a = -1.01679 + 1.14079I$ $b = 0.788104 + 0.383173I$	$2.89013 - 1.78350I$	$-4.97596 + 3.66282I$
$u = 0.48232 + 1.33424I$ $a = -0.25643 - 1.55861I$ $b = 1.173600 + 0.644507I$	$3.81421 - 11.00460I$	0
$u = 0.48232 - 1.33424I$ $a = -0.25643 + 1.55861I$ $b = 1.173600 - 0.644507I$	$3.81421 + 11.00460I$	0
$u = -0.26701 + 1.39737I$ $a = 0.073429 + 1.010430I$ $b = -0.207375 - 1.100390I$	$9.45981 + 2.99993I$	0
$u = -0.26701 - 1.39737I$ $a = 0.073429 - 1.010430I$ $b = -0.207375 + 1.100390I$	$9.45981 - 2.99993I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.571182 + 0.076246I$	$2.82580 - 1.80720I$	$-7.38072 + 3.47906I$
$a = 0.752333 + 0.565781I$		
$b = 0.072263 - 0.698701I$		
$u = 0.571182 - 0.076246I$	$2.82580 + 1.80720I$	$-7.38072 - 3.47906I$
$a = 0.752333 - 0.565781I$		
$b = 0.072263 + 0.698701I$		
$u = -1.40638 + 0.36204I$	$2.53123 - 1.88371I$	0
$a = -0.332339 - 0.060821I$		
$b = -0.869643 - 0.457967I$		
$u = -1.40638 - 0.36204I$	$2.53123 + 1.88371I$	0
$a = -0.332339 + 0.060821I$		
$b = -0.869643 + 0.457967I$		
$u = 0.350880 + 0.384879I$	$-1.10877 - 1.58604I$	$-13.47873 + 2.62387I$
$a = 0.319220 + 1.255840I$		
$b = -1.248260 - 0.193640I$		
$u = 0.350880 - 0.384879I$	$-1.10877 + 1.58604I$	$-13.47873 - 2.62387I$
$a = 0.319220 - 1.255840I$		
$b = -1.248260 + 0.193640I$		
$u = 0.71970 + 1.29915I$	$11.25790 - 1.96679I$	0
$a = -0.512729 + 0.883109I$		
$b = -1.073070 - 0.541535I$		
$u = 0.71970 - 1.29915I$	$11.25790 + 1.96679I$	0
$a = -0.512729 - 0.883109I$		
$b = -1.073070 + 0.541535I$		
$u = 0.117612 + 0.490736I$	$8.37213 - 4.43001I$	$-3.16531 - 0.91454I$
$a = -3.12111 + 2.61533I$		
$b = 0.283166 + 0.342632I$		
$u = 0.117612 - 0.490736I$	$8.37213 + 4.43001I$	$-3.16531 + 0.91454I$
$a = -3.12111 - 2.61533I$		
$b = 0.283166 - 0.342632I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.046582 + 0.497650I$ $a = 1.052030 + 0.768570I$ $b = -1.328980 - 0.322067I$	$-1.18329 - 1.57972I$	$-17.0653 + 2.5439I$
$u = -0.046582 - 0.497650I$ $a = 1.052030 - 0.768570I$ $b = -1.328980 + 0.322067I$	$-1.18329 + 1.57972I$	$-17.0653 - 2.5439I$
$u = 0.62072 + 1.39610I$ $a = 0.026471 + 1.405200I$ $b = -1.26337 - 0.80348I$	$11.1774 - 15.7364I$	0
$u = 0.62072 - 1.39610I$ $a = 0.026471 - 1.405200I$ $b = -1.26337 + 0.80348I$	$11.1774 + 15.7364I$	0
$u = -0.65349 + 1.41571I$ $a = -0.054827 - 1.108650I$ $b = -1.250520 + 0.656795I$	$6.32046 + 9.15200I$	0
$u = -0.65349 - 1.41571I$ $a = -0.054827 + 1.108650I$ $b = -1.250520 - 0.656795I$	$6.32046 - 9.15200I$	0
$u = -0.01709 + 1.56834I$ $a = -0.839883 - 0.443460I$ $b = 0.575533 + 0.419808I$	$12.64150 + 1.23886I$	0
$u = -0.01709 - 1.56834I$ $a = -0.839883 + 0.443460I$ $b = 0.575533 - 0.419808I$	$12.64150 - 1.23886I$	0
$u = 0.40026 + 1.67882I$ $a = 0.269342 - 0.314336I$ $b = -0.555974 + 0.506101I$	$12.92890 + 2.39291I$	0
$u = 0.40026 - 1.67882I$ $a = 0.269342 + 0.314336I$ $b = -0.555974 - 0.506101I$	$12.92890 - 2.39291I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.250330$		
$a = 1.31749$	-0.556749	-17.9340
$b = -0.277430$		

$$\langle -4u^{16} + 17u^{15} + \dots + b - 13, 2u^{16} - 9u^{15} + \dots + a + 9, u^{17} - 3u^{16} + \dots + 3u - 1 \rangle$$

II. $I_2^u =$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} -2u^{16} + 9u^{15} + \dots + 23u - 9 \\ 4u^{16} - 17u^{15} + \dots - 39u + 13 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} u^{16} + u^{15} + \dots + 14u - 7 \\ u^{15} - 3u^{14} + \dots - 9u^2 + 3u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 2u^{16} - 5u^{15} + \dots - 2u - 2 \\ 6u^{16} - 24u^{15} + \dots - 54u + 18 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2u^{16} - 8u^{15} + \dots - 16u + 4 \\ 4u^{16} - 17u^{15} + \dots - 39u + 13 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^{16} - 3u^{15} + \dots - 9u + 2 \\ -3u^{16} + 3u^{15} + \dots - 20u + 11 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -5u^{15} + 13u^{14} + \dots - 26u + 12 \\ -2u^{16} + 5u^{15} + \dots + 11u - 4 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 7u^{16} - 21u^{15} + \dots - 31u + 7 \\ -10u^{16} + 21u^{15} + \dots - u + 11 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 7u^{16} - 21u^{15} + \dots - 31u + 7 \\ -10u^{16} + 21u^{15} + \dots - u + 11 \end{pmatrix}$$

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = 26u^{15} - 69u^{14} + 224u^{13} - 464u^{12} + 831u^{11} - 1276u^{10} + 1639u^9 - 1917u^8 + 1955u^7 - 1740u^6 + 1409u^5 - 966u^4 + 603u^3 - 348u^2 + 124u - 61$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} + 4u^{14} + \dots - 2u + 1$
c_2	$u^{17} + u^{16} + \dots - u - 1$
c_3	$u^{17} + 3u^{16} + \dots + 3u + 1$
c_4, c_5	$u^{17} + 10u^{15} + \dots + 4u - 1$
c_6	$u^{17} - u^{16} + \dots - u + 1$
c_7	$u^{17} + 3u^{16} + \dots - 3u - 1$
c_8	$u^{17} + 2u^{15} + \dots + 8u - 1$
c_9	$u^{17} + 10u^{15} + \dots + 4u + 1$
c_{10}	$u^{17} - 3u^{16} + \dots - 3u + 1$
c_{11}	$u^{17} - 3u^{16} + \dots + 3u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 8y^{15} + \dots + 14y - 1$
c_2, c_6	$y^{17} + 11y^{16} + \dots - 9y - 1$
c_3, c_{11}	$y^{17} + 11y^{16} + \dots - 11y - 1$
c_4, c_5, c_9	$y^{17} + 20y^{16} + \dots + 6y - 1$
c_7, c_{10}	$y^{17} - 13y^{16} + \dots + 17y - 1$
c_8	$y^{17} + 4y^{16} + \dots + 64y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.970340 + 0.369674I$ $a = 0.082146 - 0.548774I$ $b = 0.958683 - 0.382244I$	$1.58186 + 1.44687I$	$-12.74306 - 0.50340I$
$u = 0.970340 - 0.369674I$ $a = 0.082146 + 0.548774I$ $b = 0.958683 + 0.382244I$	$1.58186 - 1.44687I$	$-12.74306 + 0.50340I$
$u = 1.06426$ $a = -0.386536$ $b = -0.937806$	-3.16307	-6.26090
$u = 0.415465 + 1.043720I$ $a = -0.02803 - 1.80166I$ $b = 1.14564 + 1.02665I$	$3.82426 - 5.50171I$	$-7.72486 + 9.04908I$
$u = 0.415465 - 1.043720I$ $a = -0.02803 + 1.80166I$ $b = 1.14564 - 1.02665I$	$3.82426 + 5.50171I$	$-7.72486 - 9.04908I$
$u = -0.411986 + 1.047170I$ $a = -0.41911 - 1.63987I$ $b = -0.639145 + 0.205996I$	$4.11922 + 1.69900I$	$-9.79770 - 2.05049I$
$u = -0.411986 - 1.047170I$ $a = -0.41911 + 1.63987I$ $b = -0.639145 - 0.205996I$	$4.11922 - 1.69900I$	$-9.79770 + 2.05049I$
$u = -0.415450 + 0.673435I$ $a = 2.22895 + 1.77293I$ $b = 0.692275 - 0.524414I$	$8.23130 + 5.15613I$	$-5.47996 - 8.66451I$
$u = -0.415450 - 0.673435I$ $a = 2.22895 - 1.77293I$ $b = 0.692275 + 0.524414I$	$8.23130 - 5.15613I$	$-5.47996 + 8.66451I$
$u = 0.319700 + 1.188610I$ $a = 0.64233 + 1.31072I$ $b = -0.841355 - 0.598338I$	$1.54004 - 3.31007I$	$-6.32469 + 4.61953I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.319700 - 1.188610I$ $a = 0.64233 - 1.31072I$ $b = -0.841355 + 0.598338I$	$1.54004 + 3.31007I$	$-6.32469 - 4.61953I$
$u = 0.092981 + 0.715967I$ $a = 0.082641 - 0.564957I$ $b = -1.358690 + 0.329537I$	$-0.66199 + 1.48033I$	$-1.64235 + 0.60543I$
$u = 0.092981 - 0.715967I$ $a = 0.082641 + 0.564957I$ $b = -1.358690 - 0.329537I$	$-0.66199 - 1.48033I$	$-1.64235 - 0.60543I$
$u = 0.195728 + 0.611465I$ $a = -1.91543 - 0.10133I$ $b = 1.54360 - 0.46904I$	$1.99220 + 2.29835I$	$-12.88695 - 2.30559I$
$u = 0.195728 - 0.611465I$ $a = -1.91543 + 0.10133I$ $b = 1.54360 + 0.46904I$	$1.99220 - 2.29835I$	$-12.88695 + 2.30559I$
$u = -0.19891 + 1.62363I$ $a = -0.480233 + 0.343526I$ $b = 0.467885 + 0.102198I$	$12.20840 - 1.95505I$	$-9.77000 + 2.99480I$
$u = -0.19891 - 1.62363I$ $a = -0.480233 - 0.343526I$ $b = 0.467885 - 0.102198I$	$12.20840 + 1.95505I$	$-9.77000 - 2.99480I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17} + 4u^{14} + \dots - 2u + 1)(u^{71} - u^{70} + \dots - 253u + 121)$
c_2	$(u^{17} + u^{16} + \dots - u - 1)(u^{71} + 2u^{70} + \dots + 212u + 103)$
c_3	$(u^{17} + 3u^{16} + \dots + 3u + 1)(u^{71} - 4u^{70} + \dots - 82u + 19)$
c_4, c_5	$(u^{17} + 10u^{15} + \dots + 4u - 1)(u^{71} + u^{70} + \dots - 9u + 11)$
c_6	$(u^{17} - u^{16} + \dots - u + 1)(u^{71} + 2u^{70} + \dots + 212u + 103)$
c_7	$(u^{17} + 3u^{16} + \dots - 3u - 1)(u^{71} - 18u^{69} + \dots + 28u + 19)$
c_8	$(u^{17} + 2u^{15} + \dots + 8u - 1)(u^{71} + u^{70} + \dots + 75261u + 69721)$
c_9	$(u^{17} + 10u^{15} + \dots + 4u + 1)(u^{71} + u^{70} + \dots - 9u + 11)$
c_{10}	$(u^{17} - 3u^{16} + \dots - 3u + 1)(u^{71} - 18u^{69} + \dots + 28u + 19)$
c_{11}	$(u^{17} - 3u^{16} + \dots + 3u - 1)(u^{71} - 4u^{70} + \dots - 82u + 19)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 8y^{15} + \dots + 14y - 1)(y^{71} + 13y^{70} + \dots - 110473y - 14641)$
c_2, c_6	$(y^{17} + 11y^{16} + \dots - 9y - 1)(y^{71} + 52y^{70} + \dots - 123976y - 10609)$
c_3, c_{11}	$(y^{17} + 11y^{16} + \dots - 11y - 1)(y^{71} + 48y^{70} + \dots - 4562y - 361)$
c_4, c_5, c_9	$(y^{17} + 20y^{16} + \dots + 6y - 1)(y^{71} + 77y^{70} + \dots + 103y - 121)$
c_7, c_{10}	$(y^{17} - 13y^{16} + \dots + 17y - 1)(y^{71} - 36y^{70} + \dots + 9258y - 361)$
c_8	$(y^{17} + 4y^{16} + \dots + 64y - 1)$ $\cdot (y^{71} + 37y^{70} + \dots - 78658032583y - 4861017841)$