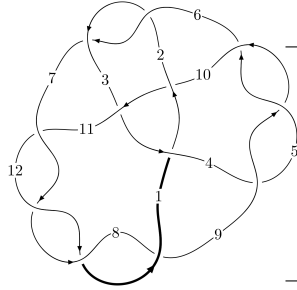
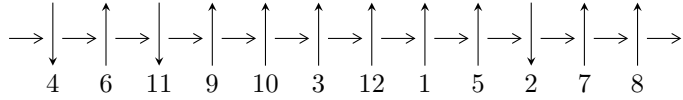


12a₀₉₈₄ (K12a₀₉₈₄)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -5.50090 \times 10^{58} u^{64} + 1.26323 \times 10^{59} u^{63} + \dots + 2.01207 \times 10^{58} b - 1.19889 \times 10^{59}, \\ - 8.05777 \times 10^{57} u^{64} - 9.65753 \times 10^{57} u^{63} + \dots + 2.01207 \times 10^{58} a + 2.45376 \times 10^{59}, u^{65} - u^{64} + \dots + 15u \rangle$$

$$I_2^u = \langle -u^{12} + 8u^{10} - u^9 - 24u^8 + 6u^7 + 34u^6 - 12u^5 - 24u^4 + 9u^3 + 8u^2 + b - 2u - 1, \\ u^{13} - 10u^{11} + 2u^{10} + 39u^9 - 15u^8 - 74u^7 + 40u^6 + 70u^5 - 46u^4 - 31u^3 + 24u^2 + a + 5u - 6, \\ u^{14} - 10u^{12} + u^{11} + 39u^{10} - 8u^9 - 75u^8 + 23u^7 + 75u^6 - 29u^5 - 39u^4 + 17u^3 + 10u^2 - 5u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 79 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.

I.

$$I_1^u = \langle -5.50 \times 10^{58} u^{64} + 1.26 \times 10^{59} u^{63} + \dots + 2.01 \times 10^{58} b - 1.20 \times 10^{59}, -8.06 \times 10^{57} u^{64} - 9.66 \times 10^{57} u^{63} + \dots + 2.01 \times 10^{58} a + 2.45 \times 10^{59}, u^{65} - u^{64} + \dots + 15u + 1 \rangle$$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.400471u^{64} + 0.479979u^{63} + \dots - 6.74840u - 12.1952 \\ 2.73394u^{64} - 6.27826u^{63} + \dots + 62.2065u + 5.95850 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.62795u^{64} + 0.503503u^{63} + \dots - 247.503u - 7.75301 \\ 1.78903u^{64} - 2.08762u^{63} + \dots + 55.9693u + 3.12673 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.863498u^{64} - 0.649790u^{63} + \dots - 2.52825u - 10.4084 \\ 1.54027u^{64} - 4.04431u^{63} + \dots + 38.9849u + 4.28279 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1.78938u^{64} - 2.87215u^{63} + \dots + 30.0752u - 9.53132 \\ 1.34504u^{64} - 2.92613u^{63} + \dots + 25.3829u + 3.29464 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.633467u^{64} + 0.762597u^{63} + \dots + 99.1976u - 8.80979 \\ -0.359097u^{64} - 0.374796u^{63} + \dots - 20.0580u + 0.472607 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.648781u^{64} - 2.39549u^{63} + \dots + 0.850744u + 17.0104 \\ 2.20379u^{64} - 2.48811u^{63} + \dots + 37.1721u + 0.459690 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $1.12410u^{64} - 3.19508u^{63} + \dots - 2.97273u + 13.0445$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{65} - 10u^{64} + \dots - 646157u + 15851$
c_2, c_6	$u^{65} - 31u^{63} + \dots + 4u + 1$
c_3	$u^{65} - 2u^{64} + \dots + 1806u - 14929$
c_4, c_5, c_9	$u^{65} + 2u^{64} + \dots + 81u - 1$
c_7, c_8, c_{11} c_{12}	$u^{65} + u^{64} + \dots + 15u - 1$
c_{10}	$u^{65} + 3u^{64} + \dots - 18311u + 5039$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{65} + 42y^{64} + \dots + 350419778635y - 251254201$
c_2, c_6	$y^{65} - 62y^{64} + \dots - 446y - 1$
c_3	$y^{65} + 34y^{64} + \dots + 1425607182y - 222875041$
c_4, c_5, c_9	$y^{65} - 74y^{64} + \dots + 6515y - 1$
c_7, c_8, c_{11} c_{12}	$y^{65} - 85y^{64} + \dots - 125y - 1$
c_{10}	$y^{65} + 27y^{64} + \dots + 94761095y - 25391521$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.889757 + 0.433062I$	$7.58885 + 1.40904I$	0
$a = 0.595422 - 0.198986I$		
$b = 0.281933 + 0.547527I$		
$u = 0.889757 - 0.433062I$	$7.58885 - 1.40904I$	0
$a = 0.595422 + 0.198986I$		
$b = 0.281933 - 0.547527I$		
$u = 0.935679 + 0.430142I$	$5.78424 + 7.60090I$	0
$a = -0.133556 + 0.252790I$		
$b = 0.002645 + 1.300830I$		
$u = 0.935679 - 0.430142I$	$5.78424 - 7.60090I$	0
$a = -0.133556 - 0.252790I$		
$b = 0.002645 - 1.300830I$		
$u = -0.868051 + 0.564459I$	$4.84341 - 0.52476I$	0
$a = -0.220898 - 0.124404I$		
$b = 0.568115 - 0.720158I$		
$u = -0.868051 - 0.564459I$	$4.84341 + 0.52476I$	0
$a = -0.220898 + 0.124404I$		
$b = 0.568115 + 0.720158I$		
$u = 0.157396 + 0.936252I$	$9.74575 + 6.14975I$	0
$a = -0.718874 - 0.451433I$		
$b = -0.314810 - 0.120327I$		
$u = 0.157396 - 0.936252I$	$9.74575 - 6.14975I$	0
$a = -0.718874 + 0.451433I$		
$b = -0.314810 + 0.120327I$		
$u = -0.866334 + 0.387041I$	$7.62669 - 5.64553I$	0
$a = 0.177626 + 0.667924I$		
$b = -0.38134 - 1.60962I$		
$u = -0.866334 - 0.387041I$	$7.62669 + 5.64553I$	0
$a = 0.177626 - 0.667924I$		
$b = -0.38134 + 1.60962I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.936520 + 0.039908I$ $a = -1.58250 - 0.14580I$ $b = 0.084560 - 1.007070I$	$11.75260 + 2.96607I$	0
$u = 0.936520 - 0.039908I$ $a = -1.58250 + 0.14580I$ $b = 0.084560 + 1.007070I$	$11.75260 - 2.96607I$	0
$u = -0.891446 + 0.041272I$ $a = -1.76473 - 0.50188I$ $b = 1.41399 + 1.40674I$	$11.30310 + 2.13802I$	$18.7856 - 3.2914I$
$u = -0.891446 - 0.041272I$ $a = -1.76473 + 0.50188I$ $b = 1.41399 - 1.40674I$	$11.30310 - 2.13802I$	$18.7856 + 3.2914I$
$u = -0.863593 + 0.206273I$ $a = 0.735499 + 0.727785I$ $b = -0.004341 + 1.321520I$	$4.72318 - 1.99911I$	$16.8500 + 4.6466I$
$u = -0.863593 - 0.206273I$ $a = 0.735499 - 0.727785I$ $b = -0.004341 - 1.321520I$	$4.72318 + 1.99911I$	$16.8500 - 4.6466I$
$u = 0.825189 + 0.164350I$ $a = 1.109760 - 0.001937I$ $b = -0.97431 - 1.02822I$	$4.60530 + 1.62841I$	$19.0869 - 5.0351I$
$u = 0.825189 - 0.164350I$ $a = 1.109760 + 0.001937I$ $b = -0.97431 + 1.02822I$	$4.60530 - 1.62841I$	$19.0869 + 5.0351I$
$u = 0.782280 + 0.256564I$ $a = -0.067172 + 0.264192I$ $b = 0.419229 - 1.239770I$	$1.05736 + 3.42824I$	$9.38737 - 8.82437I$
$u = 0.782280 - 0.256564I$ $a = -0.067172 - 0.264192I$ $b = 0.419229 + 1.239770I$	$1.05736 - 3.42824I$	$9.38737 + 8.82437I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.049540 + 0.559169I$ $a = -0.0045583 - 0.0656234I$ $b = 0.073399 + 1.340640I$	$13.4741 - 11.0913I$	0
$u = -1.049540 - 0.559169I$ $a = -0.0045583 + 0.0656234I$ $b = 0.073399 - 1.340640I$	$13.4741 + 11.0913I$	0
$u = -1.22679$ $a = -0.270827$ $b = -0.374892$	2.39981	0
$u = 0.952627 + 0.791056I$ $a = -0.0432079 + 0.0247757I$ $b = -0.402011 - 0.728715I$	$12.00730 - 0.38636I$	0
$u = 0.952627 - 0.791056I$ $a = -0.0432079 - 0.0247757I$ $b = -0.402011 + 0.728715I$	$12.00730 + 0.38636I$	0
$u = -0.096388 + 0.710673I$ $a = 0.837011 - 0.685506I$ $b = 0.488500 - 0.029172I$	$2.61549 - 3.79888I$	$9.89337 + 6.78663I$
$u = -0.096388 - 0.710673I$ $a = 0.837011 + 0.685506I$ $b = 0.488500 + 0.029172I$	$2.61549 + 3.79888I$	$9.89337 - 6.78663I$
$u = -0.706625 + 0.004243I$ $a = -0.326615 + 0.075243I$ $b = -0.438772 + 0.728388I$	$1.114370 + 0.096093I$	$9.80971 + 0.48102I$
$u = -0.706625 - 0.004243I$ $a = -0.326615 - 0.075243I$ $b = -0.438772 - 0.728388I$	$1.114370 - 0.096093I$	$9.80971 - 0.48102I$
$u = 1.30205$ $a = 0.756337$ $b = -0.949659$	5.71531	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.011225 + 0.631699I$ $a = 1.173430 + 0.684067I$ $b = -0.243702 + 0.396416I$	$4.95418 + 2.21427I$	$8.45324 - 3.11503I$
$u = 0.011225 - 0.631699I$ $a = 1.173430 - 0.684067I$ $b = -0.243702 - 0.396416I$	$4.95418 - 2.21427I$	$8.45324 + 3.11503I$
$u = 1.46845$ $a = -0.187024$ $b = 1.14204$	6.49904	0
$u = -0.414265$ $a = 3.15526$ $b = -0.0379566$	0.0573235	19.4200
$u = 0.050717 + 0.407384I$ $a = -0.98626 + 1.37309I$ $b = 0.106234 + 0.222035I$	$-1.10170 - 1.06626I$	$-0.72797 + 3.75877I$
$u = 0.050717 - 0.407384I$ $a = -0.98626 - 1.37309I$ $b = 0.106234 - 0.222035I$	$-1.10170 + 1.06626I$	$-0.72797 - 3.75877I$
$u = -0.002304 + 0.351380I$ $a = -1.95027 - 1.37104I$ $b = -0.824432 + 0.186984I$	$2.13526 + 0.06396I$	$7.70510 + 0.30032I$
$u = -0.002304 - 0.351380I$ $a = -1.95027 + 1.37104I$ $b = -0.824432 - 0.186984I$	$2.13526 - 0.06396I$	$7.70510 - 0.30032I$
$u = -0.350174$ $a = -0.614828$ $b = -0.463481$	0.719899	14.9890
$u = 1.65272 + 0.01145I$ $a = 0.47953 + 1.86610I$ $b = -0.77556 - 2.58159I$	$9.51546 + 0.03244I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.65272 - 0.01145I$ $a = 0.47953 - 1.86610I$ $b = -0.77556 + 2.58159I$	$9.51546 - 0.03244I$	0
$u = -1.65709 + 0.05434I$ $a = -0.25689 - 2.19662I$ $b = 0.48205 + 2.85246I$	$9.61848 - 4.52679I$	0
$u = -1.65709 - 0.05434I$ $a = -0.25689 + 2.19662I$ $b = 0.48205 - 2.85246I$	$9.61848 + 4.52679I$	0
$u = -1.66991 + 0.04242I$ $a = 0.76197 - 1.61866I$ $b = -0.36741 + 2.21521I$	$13.41440 - 2.40644I$	0
$u = -1.66991 - 0.04242I$ $a = 0.76197 + 1.61866I$ $b = -0.36741 - 2.21521I$	$13.41440 + 2.40644I$	0
$u = 1.67767 + 0.09570I$ $a = 0.05955 - 2.48218I$ $b = -0.26406 + 3.07470I$	$16.5146 + 7.4665I$	0
$u = 1.67767 - 0.09570I$ $a = 0.05955 + 2.48218I$ $b = -0.26406 - 3.07470I$	$16.5146 - 7.4665I$	0
$u = 1.68402 + 0.05115I$ $a = -0.52918 + 2.34990I$ $b = 1.42152 - 3.59158I$	$13.74990 + 2.97652I$	0
$u = 1.68402 - 0.05115I$ $a = -0.52918 - 2.34990I$ $b = 1.42152 + 3.59158I$	$13.74990 - 2.97652I$	0
$u = 1.69185 + 0.00973I$ $a = -1.06345 + 1.76949I$ $b = 0.64856 - 2.29976I$	$-18.9704 - 1.9445I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.69185 - 0.00973I$ $a = -1.06345 - 1.76949I$ $b = 0.64856 + 2.29976I$	$-18.9704 + 1.9445I$	0
$u = -1.69453 + 0.10643I$ $a = -0.47342 + 1.38437I$ $b = 0.84199 - 2.02585I$	$16.6703 - 3.4851I$	0
$u = -1.69453 - 0.10643I$ $a = -0.47342 - 1.38437I$ $b = 0.84199 + 2.02585I$	$16.6703 + 3.4851I$	0
$u = -1.69423 + 0.11190I$ $a = 0.06318 + 2.21599I$ $b = -0.64443 - 3.30761I$	$14.9626 - 9.7162I$	0
$u = -1.69423 - 0.11190I$ $a = 0.06318 - 2.21599I$ $b = -0.64443 + 3.30761I$	$14.9626 + 9.7162I$	0
$u = 1.69496 + 0.13798I$ $a = -0.387962 - 1.341050I$ $b = 0.04223 + 2.01775I$	$13.8035 + 3.2283I$	0
$u = 1.69496 - 0.13798I$ $a = -0.387962 + 1.341050I$ $b = 0.04223 - 2.01775I$	$13.8035 - 3.2283I$	0
$u = -1.70249 + 0.00913I$ $a = 0.76510 - 1.62903I$ $b = -1.89492 + 2.45435I$	$-18.3078 - 3.1530I$	0
$u = -1.70249 - 0.00913I$ $a = 0.76510 + 1.62903I$ $b = -1.89492 - 2.45435I$	$-18.3078 + 3.1530I$	0
$u = 1.73019 + 0.15438I$ $a = 0.02330 + 2.05733I$ $b = 0.51225 - 3.00877I$	$-16.3366 + 14.0024I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.73019 - 0.15438I$ $a = 0.02330 - 2.05733I$ $b = 0.51225 + 3.00877I$	$-16.3366 - 14.0024I$	0
$u = -1.75668 + 0.21779I$ $a = 0.222757 - 1.210750I$ $b = 0.07750 + 1.91022I$	$-18.1051 - 3.7291I$	0
$u = -1.75668 - 0.21779I$ $a = 0.222757 + 1.210750I$ $b = 0.07750 - 1.91022I$	$-18.1051 + 3.7291I$	0
$u = -0.0432217 + 0.0807555I$ $a = -11.91410 - 0.09743I$ $b = 1.40737 - 0.33426I$	$8.63685 - 2.55255I$	$12.94052 - 1.53049I$
$u = -0.0432217 - 0.0807555I$ $a = -11.91410 + 0.09743I$ $b = 1.40737 + 0.33426I$	$8.63685 + 2.55255I$	$12.94052 + 1.53049I$

II.

$$I_2^u = \langle -u^{12} + 8u^{10} + \dots + b - 1, u^{13} - 10u^{11} + \dots + a - 6, u^{14} - 10u^{12} + \dots - 5u - 1 \rangle$$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -u^{13} + 10u^{11} + \dots - 5u + 6 \\ u^{12} - 8u^{10} + \dots + 2u + 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u^{13} + 10u^{11} + \dots - 5u + 5 \\ -u^9 + 6u^7 - 12u^5 + 9u^3 - 2u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^{13} + u^{12} + \dots - 5u + 7 \\ u^{11} - 7u^9 + 17u^7 - 17u^5 + 8u^3 - 3u \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u^{13} + u^{12} + \dots - u + 7 \\ u^3 - 2u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^{13} + 10u^{11} + \dots - 3u + 3 \\ u^6 - 4u^4 + 4u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{11} + u^{10} + \dots + u - 5 \\ u^{13} - 9u^{11} + 31u^9 - 51u^7 + 41u^5 - 15u^3 + 3u \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes =

$$3u^{13} - u^{12} - 31u^{11} + 12u^{10} + 123u^9 - 54u^8 - 234u^7 + 113u^6 + 222u^5 - 112u^4 - 107u^3 + 53u^2 + 23u$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{14} + 3u^{13} + \dots - u - 1$
c_2	$u^{14} - 3u^{13} + \dots - 4u + 1$
c_3	$u^{14} + u^{13} + \dots - 2u + 1$
c_4, c_5	$u^{14} + u^{13} + \dots + u - 1$
c_6	$u^{14} + 3u^{13} + \dots + 4u + 1$
c_7, c_8	$u^{14} - 10u^{12} + \dots - 5u - 1$
c_9	$u^{14} - u^{13} + \dots - u - 1$
c_{10}	$u^{14} + 2u^{13} + \dots - u + 1$
c_{11}, c_{12}	$u^{14} - 10u^{12} + \dots + 5u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{14} + 3y^{13} + \dots - 9y + 1$
c_2, c_6	$y^{14} - 17y^{13} + \dots - 60y + 1$
c_3	$y^{14} + 3y^{13} + \dots + 4y^3 + 1$
c_4, c_5, c_9	$y^{14} - 17y^{13} + \dots - y + 1$
c_7, c_8, c_{11} c_{12}	$y^{14} - 20y^{13} + \dots - 45y + 1$
c_{10}	$y^{14} + 4y^{11} + \dots + 3y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.968017 + 0.337938I$ $a = 1.078150 - 0.571014I$ $b = -0.709305 + 0.039438I$	$10.20040 - 0.82211I$	$14.2370 - 0.6203I$
$u = 0.968017 - 0.337938I$ $a = 1.078150 + 0.571014I$ $b = -0.709305 - 0.039438I$	$10.20040 + 0.82211I$	$14.2370 + 0.6203I$
$u = -1.14545$ $a = -0.563709$ $b = -0.155012$	2.82868	18.6140
$u = -0.720462 + 0.270481I$ $a = -0.628432 - 0.675348I$ $b = 0.656755 - 0.815273I$	$3.73792 - 1.01626I$	$11.08062 + 0.61543I$
$u = -0.720462 - 0.270481I$ $a = -0.628432 + 0.675348I$ $b = 0.656755 + 0.815273I$	$3.73792 + 1.01626I$	$11.08062 - 0.61543I$
$u = 0.558487 + 0.398529I$ $a = 0.112815 + 0.298362I$ $b = -1.03491 - 1.00628I$	$8.88600 + 3.51593I$	$15.2342 - 5.4123I$
$u = 0.558487 - 0.398529I$ $a = 0.112815 - 0.298362I$ $b = -1.03491 + 1.00628I$	$8.88600 - 3.51593I$	$15.2342 + 5.4123I$
$u = 1.37496$ $a = -0.439623$ $b = 1.10231$	4.87233	7.57420
$u = -1.64578 + 0.11762I$ $a = 0.89070 - 1.83826I$ $b = -0.91793 + 2.49252I$	$16.7686 - 5.4927I$	$16.7104 + 3.4526I$
$u = -1.64578 - 0.11762I$ $a = 0.89070 + 1.83826I$ $b = -0.91793 - 2.49252I$	$16.7686 + 5.4927I$	$16.7104 - 3.4526I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.66941 + 0.05921I$ $a = -0.19583 - 1.71092I$ $b = -0.33171 + 2.51769I$	$12.32760 + 2.20627I$	$11.06041 - 0.00050I$
$u = 1.66941 - 0.05921I$ $a = -0.19583 + 1.71092I$ $b = -0.33171 - 2.51769I$	$12.32760 - 2.20627I$	$11.06041 + 0.00050I$
$u = -1.72337$ $a = 0.416712$ $b = 0.220318$	-19.0939	17.1450
$u = -0.165484$ $a = 6.07182$ $b = 0.506584$	-0.331903	-1.97830

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{14} + 3u^{13} + \dots - u - 1)(u^{65} - 10u^{64} + \dots - 646157u + 15851)$
c_2	$(u^{14} - 3u^{13} + \dots - 4u + 1)(u^{65} - 31u^{63} + \dots + 4u + 1)$
c_3	$(u^{14} + u^{13} + \dots - 2u + 1)(u^{65} - 2u^{64} + \dots + 1806u - 14929)$
c_4, c_5	$(u^{14} + u^{13} + \dots + u - 1)(u^{65} + 2u^{64} + \dots + 81u - 1)$
c_6	$(u^{14} + 3u^{13} + \dots + 4u + 1)(u^{65} - 31u^{63} + \dots + 4u + 1)$
c_7, c_8	$(u^{14} - 10u^{12} + \dots - 5u - 1)(u^{65} + u^{64} + \dots + 15u - 1)$
c_9	$(u^{14} - u^{13} + \dots - u - 1)(u^{65} + 2u^{64} + \dots + 81u - 1)$
c_{10}	$(u^{14} + 2u^{13} + \dots - u + 1)(u^{65} + 3u^{64} + \dots - 18311u + 5039)$
c_{11}, c_{12}	$(u^{14} - 10u^{12} + \dots + 5u - 1)(u^{65} + u^{64} + \dots + 15u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{14} + 3y^{13} + \dots - 9y + 1)$ $\cdot (y^{65} + 42y^{64} + \dots + 350419778635y - 251254201)$
c_2, c_6	$(y^{14} - 17y^{13} + \dots - 60y + 1)(y^{65} - 62y^{64} + \dots - 446y - 1)$
c_3	$(y^{14} + 3y^{13} + \dots + 4y^3 + 1)$ $\cdot (y^{65} + 34y^{64} + \dots + 1425607182y - 222875041)$
c_4, c_5, c_9	$(y^{14} - 17y^{13} + \dots - y + 1)(y^{65} - 74y^{64} + \dots + 6515y - 1)$
c_7, c_8, c_{11} c_{12}	$(y^{14} - 20y^{13} + \dots - 45y + 1)(y^{65} - 85y^{64} + \dots - 125y - 1)$
c_{10}	$(y^{14} + 4y^{11} + \dots + 3y + 1)$ $\cdot (y^{65} + 27y^{64} + \dots + 94761095y - 25391521)$