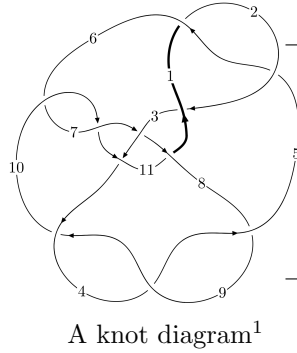
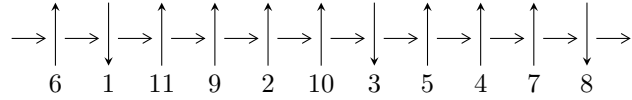


11a₁₂₂ (K11a₁₂₂)



Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 1.11816 \times 10^{100} u^{76} + 2.64440 \times 10^{100} u^{75} + \dots + 6.73504 \times 10^{100} b - 1.22538 \times 10^{101}, \\ 1.71883 \times 10^{101} u^{76} + 1.13256 \times 10^{100} u^{75} + \dots + 6.73504 \times 10^{100} a + 2.54056 \times 10^{102}, \\ u^{77} + 17u^{75} + \dots + 27u - 19 \rangle$$

$$I_2^u = \langle -2u^{12} - u^{11} - 6u^{10} - 2u^9 - 12u^8 - 3u^7 - 16u^6 - u^5 - 17u^4 + u^3 - 9u^2 + b + u - 2, \\ -u^{13} - 2u^{12} - 3u^{11} - 4u^{10} - 5u^9 - 8u^8 - 6u^7 - 8u^6 - 4u^5 - 9u^4 - 4u^2 + a + u - 3, \\ u^{14} + u^{13} + 4u^{12} + 3u^{11} + 9u^{10} + 6u^9 + 14u^8 + 7u^7 + 16u^6 + 6u^5 + 12u^4 + 3u^3 + 5u^2 + u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 91 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.

$$\mathbf{I. } I_1^u = \langle 1.12 \times 10^{100} u^{76} + 2.64 \times 10^{100} u^{75} + \dots + 6.74 \times 10^{100} b - 1.23 \times 10^{101}, 1.72 \times 10^{101} u^{76} + 1.13 \times 10^{100} u^{75} + \dots + 6.74 \times 10^{100} a + 2.54 \times 10^{102}, u^{77} + 17u^{75} + \dots + 27u - 19 \rangle$$

(i) Arc colorings

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2.55207u^{76} - 0.168159u^{75} + \dots + 78.3494u - 37.7215 \\ -0.166022u^{76} - 0.392633u^{75} + \dots - 4.69316u + 1.81941 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.359151u^{76} - 1.87506u^{75} + \dots - 18.9968u + 37.8121 \\ 0.319682u^{76} + 0.0483555u^{75} + \dots - 4.22811u + 2.05086 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.846949u^{76} + 0.811198u^{75} + \dots - 10.8950u - 3.13453 \\ -0.402179u^{76} - 0.132584u^{75} + \dots + 8.64112u + 0.469899 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -2.38605u^{76} + 0.224474u^{75} + \dots + 83.0425u - 39.5409 \\ -0.166022u^{76} - 0.392633u^{75} + \dots - 4.69316u + 1.81941 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -3.00143u^{76} - 0.717479u^{75} + \dots + 89.2717u - 30.5770 \\ -0.417577u^{76} - 0.798995u^{75} + \dots - 0.00895837u + 7.52176 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.52003u^{76} + 1.34012u^{75} + \dots - 26.0059u + 0.0397533 \\ -0.312532u^{76} + 0.595403u^{75} + \dots + 23.5262u - 15.6637 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.52003u^{76} + 1.34012u^{75} + \dots - 26.0059u + 0.0397533 \\ -0.312532u^{76} + 0.595403u^{75} + \dots + 23.5262u - 15.6637 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $2.91959u^{76} + 2.19877u^{75} + \dots - 80.9270u - 2.56214$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{77} + 17u^{75} + \dots + 27u - 19$
c_2	$u^{77} + 34u^{76} + \dots - 5009u - 361$
c_3	$u^{77} + 7u^{76} + \dots + 18u + 1$
c_4, c_8, c_9	$u^{77} - u^{76} + \dots + 6u - 19$
c_6, c_{10}	$u^{77} + u^{76} + \dots + 420u - 25$
c_7	$u^{77} - u^{76} + \dots + 138u - 323$
c_{11}	$u^{77} + 5u^{76} + \dots - 282u - 31$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{77} + 34y^{76} + \dots - 5009y - 361$
c_2	$y^{77} + 26y^{76} + \dots + 3771587y - 130321$
c_3	$y^{77} - y^{76} + \dots - 142y - 1$
c_4, c_8, c_9	$y^{77} + 75y^{76} + \dots - 3156y - 361$
c_6, c_{10}	$y^{77} - 49y^{76} + \dots + 40050y - 625$
c_7	$y^{77} + 21y^{76} + \dots - 3986156y - 104329$
c_{11}	$y^{77} - 3y^{76} + \dots + 22112y - 961$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.992506 + 0.102823I$ $a = 0.134683 + 1.153340I$ $b = 0.163116 + 1.299630I$	$0.401797 + 0.602420I$	0
$u = -0.992506 - 0.102823I$ $a = 0.134683 - 1.153340I$ $b = 0.163116 - 1.299630I$	$0.401797 - 0.602420I$	0
$u = -0.179722 + 0.986918I$ $a = 0.207589 + 0.902053I$ $b = 0.369165 + 0.668249I$	$-3.15064 + 0.31796I$	0
$u = -0.179722 - 0.986918I$ $a = 0.207589 - 0.902053I$ $b = 0.369165 - 0.668249I$	$-3.15064 - 0.31796I$	0
$u = -0.843840 + 0.510397I$ $a = -0.259951 - 0.265595I$ $b = 0.864185 + 0.337395I$	$4.98057 + 6.15682I$	0
$u = -0.843840 - 0.510397I$ $a = -0.259951 + 0.265595I$ $b = 0.864185 - 0.337395I$	$4.98057 - 6.15682I$	0
$u = -0.399420 + 0.898642I$ $a = -1.06991 - 2.30707I$ $b = -0.07605 - 1.75821I$	$-7.58964 - 1.63836I$	0
$u = -0.399420 - 0.898642I$ $a = -1.06991 + 2.30707I$ $b = -0.07605 + 1.75821I$	$-7.58964 + 1.63836I$	0
$u = 0.429893 + 0.940961I$ $a = 2.79308 - 2.27591I$ $b = -0.023408 - 1.309520I$	$-2.33844 - 1.16139I$	0
$u = 0.429893 - 0.940961I$ $a = 2.79308 + 2.27591I$ $b = -0.023408 + 1.309520I$	$-2.33844 + 1.16139I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.830555 + 0.488900I$ $a = 0.442225 + 0.331567I$ $b = -0.16770 + 1.41359I$	$-4.74914 - 4.01083I$	0
$u = 0.830555 - 0.488900I$ $a = 0.442225 - 0.331567I$ $b = -0.16770 - 1.41359I$	$-4.74914 + 4.01083I$	0
$u = -0.630106 + 0.842299I$ $a = 0.432588 - 0.361290I$ $b = -0.622284 - 0.227967I$	$3.97239 - 0.95647I$	0
$u = -0.630106 - 0.842299I$ $a = 0.432588 + 0.361290I$ $b = -0.622284 + 0.227967I$	$3.97239 + 0.95647I$	0
$u = 0.303925 + 0.883906I$ $a = 0.690866 - 1.050320I$ $b = -0.870665 - 0.383585I$	$0.163595 - 0.350353I$	0
$u = 0.303925 - 0.883906I$ $a = 0.690866 + 1.050320I$ $b = -0.870665 + 0.383585I$	$0.163595 + 0.350353I$	0
$u = 0.934821 + 0.515588I$ $a = -0.0267477 - 0.1090470I$ $b = 0.527513 - 0.109138I$	$4.74218 + 1.96042I$	0
$u = 0.934821 - 0.515588I$ $a = -0.0267477 + 0.1090470I$ $b = 0.527513 + 0.109138I$	$4.74218 - 1.96042I$	0
$u = -0.659420 + 0.849922I$ $a = -0.48497 - 1.38896I$ $b = 0.432084 - 0.317596I$	$3.96385 - 4.06799I$	0
$u = -0.659420 - 0.849922I$ $a = -0.48497 + 1.38896I$ $b = 0.432084 + 0.317596I$	$3.96385 + 4.06799I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.989911 + 0.422296I$ $a = -0.202342 - 0.690980I$ $b = 0.32715 - 1.45728I$	$-0.76965 - 10.43430I$	0
$u = 0.989911 - 0.422296I$ $a = -0.202342 + 0.690980I$ $b = 0.32715 + 1.45728I$	$-0.76965 + 10.43430I$	0
$u = 0.509665 + 0.956039I$ $a = -1.85319 + 2.97020I$ $b = 0.17312 + 1.44644I$	$-1.80643 + 6.36048I$	0
$u = 0.509665 - 0.956039I$ $a = -1.85319 - 2.97020I$ $b = 0.17312 - 1.44644I$	$-1.80643 - 6.36048I$	0
$u = 0.435143 + 1.013860I$ $a = 0.085209 + 0.808618I$ $b = 0.861923 - 0.018150I$	$-0.79562 + 3.15505I$	0
$u = 0.435143 - 1.013860I$ $a = 0.085209 - 0.808618I$ $b = 0.861923 + 0.018150I$	$-0.79562 - 3.15505I$	0
$u = 0.629756 + 0.623375I$ $a = -1.03801 + 1.27838I$ $b = 0.698651 + 0.940608I$	$3.26953 - 0.81616I$	$8.32679 + 0.51400I$
$u = 0.629756 - 0.623375I$ $a = -1.03801 - 1.27838I$ $b = 0.698651 - 0.940608I$	$3.26953 + 0.81616I$	$8.32679 - 0.51400I$
$u = 0.478152 + 1.028480I$ $a = 0.048348 + 0.408631I$ $b = 0.620681 - 0.234635I$	$-0.64979 + 3.08848I$	0
$u = 0.478152 - 1.028480I$ $a = 0.048348 - 0.408631I$ $b = 0.620681 + 0.234635I$	$-0.64979 - 3.08848I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.474736 + 0.723995I$ $a = 0.76434 + 1.28908I$ $b = -0.256829 + 1.358870I$	$-1.02736 - 2.28684I$	$7.55737 - 1.92002I$
$u = 0.474736 - 0.723995I$ $a = 0.76434 - 1.28908I$ $b = -0.256829 - 1.358870I$	$-1.02736 + 2.28684I$	$7.55737 + 1.92002I$
$u = 0.095485 + 1.136580I$ $a = -0.502266 - 0.275607I$ $b = -0.410820 - 0.500865I$	$-1.23115 + 4.61547I$	0
$u = 0.095485 - 1.136580I$ $a = -0.502266 + 0.275607I$ $b = -0.410820 + 0.500865I$	$-1.23115 - 4.61547I$	0
$u = -0.545977 + 1.014860I$ $a = 1.60168 + 1.42484I$ $b = -0.25443 + 1.49778I$	$-6.23573 - 3.59828I$	0
$u = -0.545977 - 1.014860I$ $a = 1.60168 - 1.42484I$ $b = -0.25443 - 1.49778I$	$-6.23573 + 3.59828I$	0
$u = 0.582278 + 0.996325I$ $a = -0.563794 + 0.223191I$ $b = -0.890522 + 0.862779I$	$2.13289 + 5.59350I$	0
$u = 0.582278 - 0.996325I$ $a = -0.563794 - 0.223191I$ $b = -0.890522 - 0.862779I$	$2.13289 - 5.59350I$	0
$u = -0.670483 + 0.483183I$ $a = 0.434095 + 0.052172I$ $b = 0.091326 + 1.398830I$	$-4.69637 - 1.06019I$	$1.77167 + 3.37054I$
$u = -0.670483 - 0.483183I$ $a = 0.434095 - 0.052172I$ $b = 0.091326 - 1.398830I$	$-4.69637 + 1.06019I$	$1.77167 - 3.37054I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.286414 + 0.770897I$ $a = -0.529133 + 0.340802I$ $b = -0.131537 - 1.082870I$	$-1.66948 + 4.41582I$	$1.89095 - 7.51021I$
$u = 0.286414 - 0.770897I$ $a = -0.529133 - 0.340802I$ $b = -0.131537 + 1.082870I$	$-1.66948 - 4.41582I$	$1.89095 + 7.51021I$
$u = 0.076124 + 1.176170I$ $a = -0.13232 - 2.63415I$ $b = 0.08777 - 1.53585I$	$-10.45230 - 1.94264I$	0
$u = 0.076124 - 1.176170I$ $a = -0.13232 + 2.63415I$ $b = 0.08777 + 1.53585I$	$-10.45230 + 1.94264I$	0
$u = -0.574941 + 1.029820I$ $a = -0.865274 - 0.836985I$ $b = 0.601944 - 0.367094I$	$-0.73372 - 6.46640I$	0
$u = -0.574941 - 1.029820I$ $a = -0.865274 + 0.836985I$ $b = 0.601944 + 0.367094I$	$-0.73372 + 6.46640I$	0
$u = -0.331830 + 1.139990I$ $a = 0.81647 + 2.00240I$ $b = 0.22724 + 1.48431I$	$-6.59087 + 0.43258I$	0
$u = -0.331830 - 1.139990I$ $a = 0.81647 - 2.00240I$ $b = 0.22724 - 1.48431I$	$-6.59087 - 0.43258I$	0
$u = 0.799696 + 0.881266I$ $a = 0.800094 + 0.035250I$ $b = -0.025687 - 1.228280I$	$1.67283 + 2.99269I$	0
$u = 0.799696 - 0.881266I$ $a = 0.800094 - 0.035250I$ $b = -0.025687 + 1.228280I$	$1.67283 - 2.99269I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.503300 + 1.113020I$ $a = -1.46906 - 1.97320I$ $b = 0.43026 - 1.43315I$	$-5.46055 - 8.15782I$	0
$u = -0.503300 - 1.113020I$ $a = -1.46906 + 1.97320I$ $b = 0.43026 + 1.43315I$	$-5.46055 + 8.15782I$	0
$u = -0.588221 + 0.492828I$ $a = 1.010850 + 0.219431I$ $b = -0.413424 - 0.322512I$	$0.78679 + 1.78171I$	$6.93161 - 4.77332I$
$u = -0.588221 - 0.492828I$ $a = 1.010850 - 0.219431I$ $b = -0.413424 + 0.322512I$	$0.78679 - 1.78171I$	$6.93161 + 4.77332I$
$u = -0.654044 + 1.088480I$ $a = 0.275617 + 1.042120I$ $b = -0.951503 + 0.450492I$	$3.22901 - 11.73080I$	0
$u = -0.654044 - 1.088480I$ $a = 0.275617 - 1.042120I$ $b = -0.951503 - 0.450492I$	$3.22901 + 11.73080I$	0
$u = 0.651187 + 1.101690I$ $a = -1.82390 + 1.46274I$ $b = 0.23240 + 1.44840I$	$-6.58950 + 9.55660I$	0
$u = 0.651187 - 1.101690I$ $a = -1.82390 - 1.46274I$ $b = 0.23240 - 1.44840I$	$-6.58950 - 9.55660I$	0
$u = 0.734204 + 1.069320I$ $a = 0.264381 - 0.642265I$ $b = -0.461381 - 0.424979I$	$3.10184 + 4.12640I$	0
$u = 0.734204 - 1.069320I$ $a = 0.264381 + 0.642265I$ $b = -0.461381 + 0.424979I$	$3.10184 - 4.12640I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.463474 + 0.499512I$ $a = 1.005840 - 0.131908I$ $b = -0.391996 - 0.381119I$	$0.906262 + 0.882340I$	$7.93772 - 5.58390I$
$u = 0.463474 - 0.499512I$ $a = 1.005840 + 0.131908I$ $b = -0.391996 + 0.381119I$	$0.906262 - 0.882340I$	$7.93772 + 5.58390I$
$u = -0.655837 + 0.159805I$ $a = 0.540689 - 0.181974I$ $b = -0.322778 - 1.352790I$	$-2.86462 + 3.78073I$	$3.56597 - 3.81882I$
$u = -0.655837 - 0.159805I$ $a = 0.540689 + 0.181974I$ $b = -0.322778 + 1.352790I$	$-2.86462 - 3.78073I$	$3.56597 + 3.81882I$
$u = 0.674571 + 1.175150I$ $a = 1.41651 - 1.82923I$ $b = -0.35663 - 1.51897I$	$-3.0941 + 16.4594I$	0
$u = 0.674571 - 1.175150I$ $a = 1.41651 + 1.82923I$ $b = -0.35663 + 1.51897I$	$-3.0941 - 16.4594I$	0
$u = -0.534948 + 1.254540I$ $a = -1.24467 - 1.97836I$ $b = 0.040134 - 1.286720I$	$-3.56674 - 4.58685I$	0
$u = -0.534948 - 1.254540I$ $a = -1.24467 + 1.97836I$ $b = 0.040134 + 1.286720I$	$-3.56674 + 4.58685I$	0
$u = 0.040521 + 1.392890I$ $a = -0.13926 + 2.26692I$ $b = -0.18547 + 1.46609I$	$-7.50502 - 7.02191I$	0
$u = 0.040521 - 1.392890I$ $a = -0.13926 - 2.26692I$ $b = -0.18547 - 1.46609I$	$-7.50502 + 7.02191I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.12911 + 0.85261I$ $a = -0.402883 - 0.940773I$ $b = 0.075532 - 1.274920I$	$1.39277 - 3.88492I$	0
$u = -1.12911 - 0.85261I$ $a = -0.402883 + 0.940773I$ $b = 0.075532 + 1.274920I$	$1.39277 + 3.88492I$	0
$u = -0.071474 + 0.574838I$ $a = 2.49648 + 0.24444I$ $b = 0.025774 - 0.381419I$	$0.98061 + 1.39590I$	$4.58324 - 5.64184I$
$u = -0.071474 - 0.574838I$ $a = 2.49648 - 0.24444I$ $b = 0.025774 + 0.381419I$	$0.98061 - 1.39590I$	$4.58324 + 5.64184I$
$u = -0.65986 + 1.27360I$ $a = 0.92752 + 2.00650I$ $b = -0.18093 + 1.46647I$	$-3.02971 - 6.56618I$	0
$u = -0.65986 - 1.27360I$ $a = 0.92752 - 2.00650I$ $b = -0.18093 - 1.46647I$	$-3.02971 + 6.56618I$	0
$u = 0.409048$ $a = 1.15285$ $b = -0.711871$	1.45831	6.75650

II.

$$I_2^u = \langle -2u^{12} - u^{11} + \dots + b - 2, -u^{13} - 2u^{12} + \dots + a - 3, u^{14} + u^{13} + \dots + u + 1 \rangle$$

(i) Arc colorings

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{13} + 2u^{12} + \dots - u + 3 \\ 2u^{12} + u^{11} + \dots - u + 2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^{13} + 3u^{12} + \dots - u + 3 \\ -u^{12} - u^{11} - 3u^{10} - 2u^9 - 6u^8 - 4u^7 - 8u^6 - 3u^5 - 8u^4 - 3u^3 - 4u^2 - 2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -3u^{12} - 3u^{11} + \dots - 4u - 4 \\ u^{13} - u^{12} + \dots + u - 2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} u^{13} + 2u^{11} - 2u^{10} + 3u^9 - 4u^8 + 3u^7 - 8u^6 + 3u^5 - 8u^4 + u^3 - 5u^2 + 1 \\ 2u^{12} + u^{11} + \dots - u + 2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^{13} + u^{12} + \dots - 4u^2 + 1 \\ 2u^{12} + u^{11} + \dots - u + 2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^{13} - 2u^{12} + \dots + 5u - 2 \\ u^{13} + 3u^{11} + 6u^9 + 8u^7 - u^6 + 9u^5 - 2u^4 + 6u^3 + u + 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^{13} - 2u^{12} + \dots + 5u - 2 \\ u^{13} + 3u^{11} + 6u^9 + 8u^7 - u^6 + 9u^5 - 2u^4 + 6u^3 + u + 1 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes

$$= -u^{13} - 3u^{12} - 7u^{11} - 7u^{10} - 15u^9 - 13u^8 - 27u^7 - 15u^6 - 29u^5 - 11u^4 - 29u^3 - 2u^2 - 11u + 4$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{14} - u^{13} + \dots - u + 1$
c_2	$u^{14} + 7u^{13} + \dots + 9u + 1$
c_3	$u^{14} + 2u^{11} - 2u^{10} + 2u^8 - 6u^7 + 4u^6 + 2u^5 - 4u^4 + 2u^3 + u^2 - 2u + 1$
c_4	$u^{14} + 8u^{12} + \dots + 4u^2 + 1$
c_5	$u^{14} + u^{13} + \dots + u + 1$
c_6	$u^{14} - 2u^{13} + \dots - 2u + 1$
c_7	$u^{14} + 3u^{12} + \dots + 4u^2 + 1$
c_8, c_9	$u^{14} + 8u^{12} + \dots + 4u^2 + 1$
c_{10}	$u^{14} + 2u^{13} + \dots + 2u + 1$
c_{11}	$u^{14} + u^{12} - 3u^{11} - 2u^{10} - 2u^9 + u^8 + 3u^7 + 5u^6 + u^5 + u^4 - 2u^3 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{14} + 7y^{13} + \dots + 9y + 1$
c_2	$y^{14} + 7y^{13} + \dots + 5y + 1$
c_3	$y^{14} - 4y^{12} + \dots - 2y + 1$
c_4, c_8, c_9	$y^{14} + 16y^{13} + \dots + 8y + 1$
c_6, c_{10}	$y^{14} - 12y^{13} + \dots - 14y + 1$
c_7	$y^{14} + 6y^{13} + \dots + 8y + 1$
c_{11}	$y^{14} + 2y^{13} + \dots + 2y^2 + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.263802 + 0.940835I$ $a = 1.19274 + 2.28120I$ $b = 0.04502 + 1.68553I$	$-8.10462 - 1.08865I$	$-3.05079 - 1.27103I$
$u = -0.263802 - 0.940835I$ $a = 1.19274 - 2.28120I$ $b = 0.04502 - 1.68553I$	$-8.10462 + 1.08865I$	$-3.05079 + 1.27103I$
$u = 0.410511 + 1.042370I$ $a = 0.131453 + 0.695630I$ $b = 0.588176 - 0.305776I$	$-0.04552 + 3.64299I$	$9.10899 - 6.17803I$
$u = 0.410511 - 1.042370I$ $a = 0.131453 - 0.695630I$ $b = 0.588176 + 0.305776I$	$-0.04552 - 3.64299I$	$9.10899 + 6.17803I$
$u = 0.760930 + 0.850713I$ $a = -0.428317 + 0.669340I$ $b = -0.100644 + 0.531390I$	$3.68757 + 2.89359I$	$10.43723 - 2.39081I$
$u = 0.760930 - 0.850713I$ $a = -0.428317 - 0.669340I$ $b = -0.100644 - 0.531390I$	$3.68757 - 2.89359I$	$10.43723 + 2.39081I$
$u = 0.312796 + 0.732458I$ $a = 1.95777 - 1.12081I$ $b = -0.492123 - 0.518251I$	$1.193900 - 0.561188I$	$7.81743 - 1.40333I$
$u = 0.312796 - 0.732458I$ $a = 1.95777 + 1.12081I$ $b = -0.492123 + 0.518251I$	$1.193900 + 0.561188I$	$7.81743 + 1.40333I$
$u = -0.942798 + 0.813476I$ $a = 0.324386 + 0.502415I$ $b = -0.045526 + 1.274860I$	$0.85500 - 3.43645I$	$1.10715 + 2.59332I$
$u = -0.942798 - 0.813476I$ $a = 0.324386 - 0.502415I$ $b = -0.045526 - 1.274860I$	$0.85500 + 3.43645I$	$1.10715 - 2.59332I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.495691 + 1.193760I$ $a = -1.17726 - 2.37223I$ $b = 0.19941 - 1.40134I$	$-4.20321 - 6.46120I$	$0.62933 + 6.25768I$
$u = -0.495691 - 1.193760I$ $a = -1.17726 + 2.37223I$ $b = 0.19941 + 1.40134I$	$-4.20321 + 6.46120I$	$0.62933 - 6.25768I$
$u = -0.281944 + 0.557057I$ $a = 1.99922 - 0.82002I$ $b = -0.194314 - 1.267040I$	$-1.60779 + 3.00668I$	$2.45066 - 4.48374I$
$u = -0.281944 - 0.557057I$ $a = 1.99922 + 0.82002I$ $b = -0.194314 + 1.267040I$	$-1.60779 - 3.00668I$	$2.45066 + 4.48374I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{14} - u^{13} + \dots - u + 1)(u^{77} + 17u^{75} + \dots + 27u - 19)$
c_2	$(u^{14} + 7u^{13} + \dots + 9u + 1)(u^{77} + 34u^{76} + \dots - 5009u - 361)$
c_3	$(u^{14} + 2u^{11} - 2u^{10} + 2u^8 - 6u^7 + 4u^6 + 2u^5 - 4u^4 + 2u^3 + u^2 - 2u + 1) \cdot (u^{77} + 7u^{76} + \dots + 18u + 1)$
c_4	$(u^{14} + 8u^{12} + \dots + 4u^2 + 1)(u^{77} - u^{76} + \dots + 6u - 19)$
c_5	$(u^{14} + u^{13} + \dots + u + 1)(u^{77} + 17u^{75} + \dots + 27u - 19)$
c_6	$(u^{14} - 2u^{13} + \dots - 2u + 1)(u^{77} + u^{76} + \dots + 420u - 25)$
c_7	$(u^{14} + 3u^{12} + \dots + 4u^2 + 1)(u^{77} - u^{76} + \dots + 138u - 323)$
c_8, c_9	$(u^{14} + 8u^{12} + \dots + 4u^2 + 1)(u^{77} - u^{76} + \dots + 6u - 19)$
c_{10}	$(u^{14} + 2u^{13} + \dots + 2u + 1)(u^{77} + u^{76} + \dots + 420u - 25)$
c_{11}	$(u^{14} + u^{12} - 3u^{11} - 2u^{10} - 2u^9 + u^8 + 3u^7 + 5u^6 + u^5 + u^4 - 2u^3 + 1) \cdot (u^{77} + 5u^{76} + \dots - 282u - 31)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{14} + 7y^{13} + \dots + 9y + 1)(y^{77} + 34y^{76} + \dots - 5009y - 361)$
c_2	$(y^{14} + 7y^{13} + \dots + 5y + 1)(y^{77} + 26y^{76} + \dots + 3771587y - 130321)$
c_3	$(y^{14} - 4y^{12} + \dots - 2y + 1)(y^{77} - y^{76} + \dots - 142y - 1)$
c_4, c_8, c_9	$(y^{14} + 16y^{13} + \dots + 8y + 1)(y^{77} + 75y^{76} + \dots - 3156y - 361)$
c_6, c_{10}	$(y^{14} - 12y^{13} + \dots - 14y + 1)(y^{77} - 49y^{76} + \dots + 40050y - 625)$
c_7	$(y^{14} + 6y^{13} + \dots + 8y + 1)(y^{77} + 21y^{76} + \dots - 3986156y - 104329)$
c_{11}	$(y^{14} + 2y^{13} + \dots + 2y^2 + 1)(y^{77} - 3y^{76} + \dots + 22112y - 961)$