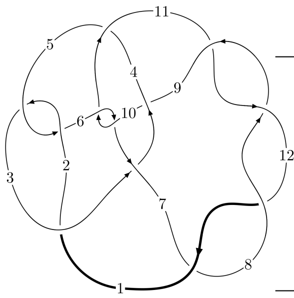
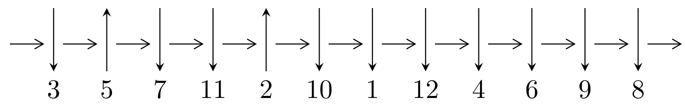
$12a_{0076}$ ($K12a_{0076}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 7.93101 \times 10^{98} u^{76} + 1.64483 \times 10^{99} u^{75} + \cdots + 2.50573 \times 10^{99} b - 1.01951 \times 10^{100}, \\
& - 2.37414 \times 10^{100} u^{76} - 7.33884 \times 10^{100} u^{75} + \cdots + 6.26432 \times 10^{100} a - 4.38701 \times 10^{101}, \\
& u^{77} + 4u^{76} + \cdots + 101u + 25 \rangle \\
I_2^u = \langle & -320a^2u - 190a^2 - 889au + 1993b + 1652a + 701u - 518,\ 5a^3 - 5a^2u - 4a^2 - 4au - a + 11u - 11, \\
& u^2 - u + 1 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 83 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. $\boldsymbol{I_1^u = \langle 7.93 \times 10^{98} u^{76} + 1.64 \times 10^{99} u^{75} + \cdots + 2.51 \times 10^{99} b - 1.02 \times 10^{100},\ -2.37 \times 10^{100} u^{76} - 7.34 \times 10^{100} u^{75} + \cdots + 6.26 \times 10^{100} a - 4.39 \times 10^{101},\ u^{77} + 4u^{76} + \cdots + 101u + 25\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ u^5 + u^3 + u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.378995u^{76} + 1.17153u^{75} + \cdots + 38.9689u + 7.00317 \\ -0.316515u^{76} - 0.656426u^{75} + \cdots + 3.88281u + 4.06872 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0.382922u^{76} + 1.34261u^{75} + \cdots + 5.59826u + 1.24813 \\ 0.316632u^{76} + 1.34041u^{75} + \cdots + 40.8488u + 10.7971 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.0624796u^{76} + 0.515104u^{75} + \cdots + 42.8517u + 11.0719 \\ -0.316515u^{76} - 0.656426u^{75} + \cdots + 3.88281u + 4.06872 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.169032u^{76} - 0.182910u^{75} + \cdots - 24.2572u - 6.80526 \\ 0.289827u^{76} + 0.617219u^{75} + \cdots - 5.81712u - 2.87335 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.172862u^{76} - 0.154859u^{75} + \cdots - 23.2157u - 6.96987 \\ 0.326324u^{76} + 0.494996u^{75} + \cdots - 15.9347u - 6.46441 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.155679u^{76} - 0.308708u^{75} + \cdots + 14.0992u + 4.25438 \\ -0.0753730u^{76} - 0.185600u^{75} + \cdots + 1.65389u + 2.31494 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0.241155u^{76} + 0.606307u^{75} + \cdots - 6.10719u - 4.25876 \\ 0.00962114u^{76} + 0.358023u^{75} + \cdots + 14.6700u + 3.86949 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.55122u^{76} - 3.85524u^{75} + \cdots - 10.1221u + 0.155354$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{77} + 26u^{76} + \cdots + 4801u - 625$
c_2, c_5	$u^{77} + 4u^{76} + \cdots + 101u + 25$
c_3	$25(25u^{77} - 140u^{76} + \cdots - 1.87152 \times 10^7 u + 4199891)$
c_4	$25(25u^{77} - 45u^{76} + \cdots + 49984u + 52544)$
c_6, c_{10}	$u^{77} + 3u^{76} + \cdots - 8u^2 + 1$
c_7, c_8, c_{11} c_{12}	$u^{77} - 3u^{76} + \cdots - 6u + 1$
c_9	$u^{77} + u^{76} + \cdots + 15200u + 8000$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{77} + 54y^{76} + \cdots + 264859601y - 390625$
c_2, c_5	$y^{77} + 26y^{76} + \cdots + 4801y - 625$
c_3	$625 \cdot (625y^{77} + 32100y^{76} + \cdots - 165791891422930y - 17639084411881)$
c_4	$625(625y^{77} + 30025y^{76} + \cdots - 4.56084 \times 10^{10}y - 2.76087 \times 10^{9})$
c_6, c_{10}	$y^{77} + 49y^{76} + \cdots + 16y - 1$
c_7, c_8, c_{11} c_{12}	$y^{77} + 93y^{76} + \cdots + 16y - 1$
c_9	$y^{77} + 35y^{76} + \cdots - 964480000y - 64000000$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.023387 + 0.993675I$ $a = -1.48275 + 0.20664I$ $b = 0.625759 + 0.325187I$	$-1.74432 + 2.06267I$	0
$u = 0.023387 - 0.993675I$ $a = -1.48275 - 0.20664I$ $b = 0.625759 - 0.325187I$	$-1.74432 - 2.06267I$	0
$u = -0.689051 + 0.710247I$ $a = -0.672174 + 0.847004I$ $b = 1.093650 - 0.218602I$	$3.26103 + 2.04999I$	0
$u = -0.689051 - 0.710247I$ $a = -0.672174 - 0.847004I$ $b = 1.093650 + 0.218602I$	$3.26103 - 2.04999I$	0
$u = 0.437005 + 0.886797I$ $a = -0.617746 - 0.137414I$ $b = 0.200968 + 0.136308I$	$-0.31514 + 1.81008I$	0
$u = 0.437005 - 0.886797I$ $a = -0.617746 + 0.137414I$ $b = 0.200968 - 0.136308I$	$-0.31514 - 1.81008I$	0
$u = -0.802987 + 0.670328I$ $a = -0.132409 + 0.135406I$ $b = -0.43177 + 1.42400I$	$5.18414 + 3.21854I$	0
$u = -0.802987 - 0.670328I$ $a = -0.132409 - 0.135406I$ $b = -0.43177 - 1.42400I$	$5.18414 - 3.21854I$	0
$u = 0.580300 + 0.745312I$ $a = 0.01473 + 1.95275I$ $b = -0.032548 + 1.130350I$	$2.99487 + 1.53571I$	$-8.00000 + 0.I$
$u = 0.580300 - 0.745312I$ $a = 0.01473 - 1.95275I$ $b = -0.032548 - 1.130350I$	$2.99487 - 1.53571I$	$-8.00000 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.850071 + 0.645897I$ $a = 0.687278 - 0.617056I$ $b = -1.031170 + 0.139364I$	$12.61110 + 4.44495I$	0
$u = -0.850071 - 0.645897I$ $a = 0.687278 + 0.617056I$ $b = -1.031170 - 0.139364I$	$12.61110 - 4.44495I$	0
$u = 0.107724 + 1.076330I$ $a = 0.83445 - 1.21670I$ $b = -0.391468 + 0.997418I$	$-1.08919 + 2.96820I$	0
$u = 0.107724 - 1.076330I$ $a = 0.83445 + 1.21670I$ $b = -0.391468 - 0.997418I$	$-1.08919 - 2.96820I$	0
$u = -0.645982 + 0.868158I$ $a = 0.960269 - 0.964614I$ $b = -1.243670 + 0.117565I$	$-0.13971 - 2.51501I$	0
$u = -0.645982 - 0.868158I$ $a = 0.960269 + 0.964614I$ $b = -1.243670 - 0.117565I$	$-0.13971 + 2.51501I$	0
$u = -0.756836 + 0.799522I$ $a = 0.201274 + 0.141714I$ $b = 0.47634 - 1.45900I$	$7.35750 - 1.25503I$	0
$u = -0.756836 - 0.799522I$ $a = 0.201274 - 0.141714I$ $b = 0.47634 + 1.45900I$	$7.35750 + 1.25503I$	0
$u = -0.925906 + 0.617713I$ $a = -0.094308 - 0.190665I$ $b = 0.44275 - 1.38890I$	$8.30126 + 7.27195I$	0
$u = -0.925906 - 0.617713I$ $a = -0.094308 + 0.190665I$ $b = 0.44275 + 1.38890I$	$8.30126 - 7.27195I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.171129 + 0.864991I$ $a = 1.77593 - 0.38376I$ $b = -0.748125 - 0.526560I$	$-2.60922 - 1.38173I$	$-13.51813 + 2.09755I$
$u = -0.171129 - 0.864991I$ $a = 1.77593 + 0.38376I$ $b = -0.748125 + 0.526560I$	$-2.60922 + 1.38173I$	$-13.51813 - 2.09755I$
$u = 0.564948 + 0.667315I$ $a = -1.52137 - 2.48650I$ $b = 0.111660 + 0.733444I$	$10.81200 + 1.40949I$	$-6.43106 - 2.48150I$
$u = 0.564948 - 0.667315I$ $a = -1.52137 + 2.48650I$ $b = 0.111660 - 0.733444I$	$10.81200 - 1.40949I$	$-6.43106 + 2.48150I$
$u = 0.582271 + 0.971594I$ $a = 0.641231 - 0.469572I$ $b = -0.301785 + 0.108520I$	$1.27808 + 3.12805I$	0
$u = 0.582271 - 0.971594I$ $a = 0.641231 + 0.469572I$ $b = -0.301785 - 0.108520I$	$1.27808 - 3.12805I$	0
$u = -0.378177 + 0.760297I$ $a = -1.97319 + 0.66535I$ $b = 0.893170 + 0.851679I$	$2.80627 - 4.33786I$	$-7.45487 - 3.06969I$
$u = -0.378177 - 0.760297I$ $a = -1.97319 - 0.66535I$ $b = 0.893170 - 0.851679I$	$2.80627 + 4.33786I$	$-7.45487 + 3.06969I$
$u = -0.790859 + 0.836843I$ $a = 1.77041 - 0.38931I$ $b = -0.62234 - 1.33323I$	$16.1641 - 1.5411I$	0
$u = -0.790859 - 0.836843I$ $a = 1.77041 + 0.38931I$ $b = -0.62234 + 1.33323I$	$16.1641 + 1.5411I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.639240 + 0.976315I$ $a = -1.65830 - 0.49768I$ $b = 0.125080 - 1.109880I$	$2.18376 + 3.33368I$	0
$u = 0.639240 - 0.976315I$ $a = -1.65830 + 0.49768I$ $b = 0.125080 + 1.109880I$	$2.18376 - 3.33368I$	0
$u = 0.283439 + 0.778804I$ $a = 2.33704 - 1.18812I$ $b = -0.062296 - 1.174070I$	$9.98727 + 1.50639I$	$-0.66145 - 3.42901I$
$u = 0.283439 - 0.778804I$ $a = 2.33704 + 1.18812I$ $b = -0.062296 + 1.174070I$	$9.98727 - 1.50639I$	$-0.66145 + 3.42901I$
$u = 0.117920 + 1.168920I$ $a = 1.291680 - 0.300778I$ $b = -0.628830 - 0.167135I$	$5.79410 + 3.63952I$	0
$u = 0.117920 - 1.168920I$ $a = 1.291680 + 0.300778I$ $b = -0.628830 + 0.167135I$	$5.79410 - 3.63952I$	0
$u = -0.723744 + 0.928946I$ $a = -1.85578 + 0.31129I$ $b = 0.61575 + 1.38912I$	$6.95838 - 4.36192I$	0
$u = -0.723744 - 0.928946I$ $a = -1.85578 - 0.31129I$ $b = 0.61575 - 1.38912I$	$6.95838 + 4.36192I$	0
$u = 1.082260 + 0.468850I$ $a = -0.123493 - 0.256538I$ $b = 0.044273 - 1.217200I$	$6.73924 + 1.85246I$	0
$u = 1.082260 - 0.468850I$ $a = -0.123493 + 0.256538I$ $b = 0.044273 + 1.217200I$	$6.73924 - 1.85246I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.676567 + 0.972926I$ $a = -1.098660 + 0.822983I$ $b = 1.181550 - 0.009799I$	$2.47138 - 7.34623I$	0
$u = -0.676567 - 0.972926I$ $a = -1.098660 - 0.822983I$ $b = 1.181550 + 0.009799I$	$2.47138 + 7.34623I$	0
$u = -1.025320 + 0.614382I$ $a = 0.228092 + 0.157777I$ $b = -0.45532 + 1.37631I$	$17.3658 + 9.6655I$	0
$u = -1.025320 - 0.614382I$ $a = 0.228092 - 0.157777I$ $b = -0.45532 - 1.37631I$	$17.3658 - 9.6655I$	0
$u = -0.769678 + 0.915176I$ $a = -0.069711 - 0.333527I$ $b = -0.52438 + 1.43530I$	$15.9240 - 4.3215I$	0
$u = -0.769678 - 0.915176I$ $a = -0.069711 + 0.333527I$ $b = -0.52438 - 1.43530I$	$15.9240 + 4.3215I$	0
$u = 0.457284 + 0.657961I$ $a = 0.61765 + 1.70350I$ $b = -0.013064 - 0.547144I$	$2.28018 + 1.37290I$	$-3.34311 - 4.48860I$
$u = 0.457284 - 0.657961I$ $a = 0.61765 - 1.70350I$ $b = -0.013064 + 0.547144I$	$2.28018 - 1.37290I$	$-3.34311 + 4.48860I$
$u = -0.271251 + 0.735692I$ $a = -0.256281 + 1.284760I$ $b = 0.764229 - 0.712502I$	$2.74924 + 1.47081I$	$-7.37057 - 5.74659I$
$u = -0.271251 - 0.735692I$ $a = -0.256281 - 1.284760I$ $b = 0.764229 + 0.712502I$	$2.74924 - 1.47081I$	$-7.37057 + 5.74659I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.672668 + 1.026560I$ $a = -0.772233 + 0.609784I$ $b = 0.372498 - 0.168400I$	$9.55875 + 3.71126I$	0
$u = 0.672668 - 1.026560I$ $a = -0.772233 - 0.609784I$ $b = 0.372498 + 0.168400I$	$9.55875 - 3.71126I$	0
$u = -0.712145 + 1.018770I$ $a = 1.86345 - 0.22946I$ $b = -0.57025 - 1.40468I$	$4.13125 - 8.92679I$	0
$u = -0.712145 - 1.018770I$ $a = 1.86345 + 0.22946I$ $b = -0.57025 + 1.40468I$	$4.13125 + 8.92679I$	0
$u = 0.640073 + 0.401249I$ $a = 0.61346 - 1.74507I$ $b = -0.242727 + 0.508756I$	$10.92250 + 1.41966I$	$-3.27349 - 3.63147I$
$u = 0.640073 - 0.401249I$ $a = 0.61346 + 1.74507I$ $b = -0.242727 - 0.508756I$	$10.92250 - 1.41966I$	$-3.27349 + 3.63147I$
$u = -0.725026 + 1.045960I$ $a = 1.119890 - 0.723073I$ $b = -1.123130 - 0.004421I$	$11.3969 - 10.3217I$	0
$u = -0.725026 - 1.045960I$ $a = 1.119890 + 0.723073I$ $b = -1.123130 + 0.004421I$	$11.3969 + 10.3217I$	0
$u = 0.201201 + 1.271660I$ $a = -0.929381 + 0.895259I$ $b = 0.346853 - 1.094610I$	$0.58610 + 5.84122I$	0
$u = 0.201201 - 1.271660I$ $a = -0.929381 - 0.895259I$ $b = 0.346853 + 1.094610I$	$0.58610 - 5.84122I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.740013+1.082960I$ $a=-1.83895+0.18377I$ $b=\ \ 0.54663+1.38812I$	$6.8662-13.3948I$	0
$u=-0.740013-1.082960I$ $a=-1.83895-0.18377I$ $b=\ \ 0.54663-1.38812I$	$6.8662+13.3948I$	0
$u=-0.771024+1.128770I$ $a=\ \ 1.81769-0.15434I$ $b=-0.53700-1.37405I$	$15.7376-16.1737I$	0
$u=-0.771024-1.128770I$ $a=\ \ 1.81769+0.15434I$ $b=-0.53700+1.37405I$	$15.7376+16.1737I$	0
$u=\ \ 0.320237+0.541394I$ $a=-0.18136+2.01696I$ $b=\ \ 0.231553-0.595039I$	$2.26536+1.35585I$	$-3.06700-4.58945I$
$u=\ \ 0.320237-0.541394I$ $a=-0.18136-2.01696I$ $b=\ \ 0.231553+0.595039I$	$2.26536-1.35585I$	$-3.06700+4.58945I$
$u=\ \ 1.296830+0.495291I$ $a=\ \ 0.176059+0.133103I$ $b=-0.049062+1.240290I$	$15.6374+2.0891I$	0
$u=\ \ 1.296830-0.495291I$ $a=\ \ 0.176059-0.133103I$ $b=-0.049062-1.240290I$	$15.6374-2.0891I$	0
$u=\ \ 0.825265+1.129010I$ $a=\ \ 0.971647+0.072412I$ $b=-0.154594+1.175390I$	$4.80654+4.92929I$	0
$u=\ \ 0.825265-1.129010I$ $a=\ \ 0.971647-0.072412I$ $b=-0.154594-1.175390I$	$4.80654-4.92929I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.512499 + 0.280972I$ $a = -0.726334 + 0.007761I$ $b = -0.013821 + 1.181210I$	$3.20881 + 1.14210I$	$-4.80285 - 5.42907I$
$u = 0.512499 - 0.280972I$ $a = -0.726334 - 0.007761I$ $b = -0.013821 - 1.181210I$	$3.20881 - 1.14210I$	$-4.80285 + 5.42907I$
$u = 0.23954 + 1.42224I$ $a = 0.869717 - 0.736081I$ $b = -0.336774 + 1.148260I$	$8.71669 + 7.31926I$	0
$u = 0.23954 - 1.42224I$ $a = 0.869717 + 0.736081I$ $b = -0.336774 - 1.148260I$	$8.71669 - 7.31926I$	0
$u = 0.93837 + 1.22898I$ $a = -0.807522 + 0.046238I$ $b = 0.163263 - 1.205750I$	$13.4511 + 5.6875I$	0
$u = 0.93837 - 1.22898I$ $a = -0.807522 - 0.046238I$ $b = 0.163263 + 1.205750I$	$13.4511 - 5.6875I$	0
$u = -0.193384$ $a = -1.47995$ $b = -0.443692$	-0.677358	-14.5420

II. $\boldsymbol{I_2^u = \langle -320a^2u - 889au + \cdots + 1652a - 518,\ 5a^3 - 5a^2u - 4a^2 - 4au - a + 11u - 11,\ u^2 - u + 1\rangle}$

(i) Arc colorings

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

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ u-1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u \\ u-1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} a \\ 0.160562a^2u + 0.446061au + \cdots - 0.828901a + 0.259910 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.169594a^2u + 0.114902au + \cdots - 0.150527a + 0.437030 \\ -0.0326141a^2u - 0.137481au + \cdots + 0.105871a - 0.584044 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.160562a^2u + 0.446061au + \cdots + 0.171099a + 0.259910 \\ 0.160562a^2u + 0.446061au + \cdots - 0.828901a + 0.259910 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0501756a^2u + 0.173106au + \cdots + 0.00903161a + 0.793778 \\ -0.880582a^2u + 0.288008au + \cdots - 0.141495a - 0.769192 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.830406a^2u - 0.114902au + \cdots + 0.150527a + 1.56297 \\ -0.880582a^2u + 0.288008au + \cdots - 0.141495a - 0.769192 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.160562a^2u + 0.446061au + \cdots + 0.171099a + 0.259910 \\ 0.160562a^2u + 0.446061au + \cdots - 0.828901a + 0.259910 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.158053a^2u + 0.204717au + \cdots + 0.871550a - 0.400401 \\ -0.720020a^2u + 0.734069au + \cdots - 0.970396a - 1.50928 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{402}{1993}a^2u - \frac{135}{1993}a^2 - \frac{8761}{1993}au + \frac{8936}{1993}a - \frac{10883}{1993}u - \frac{9389}{1993}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$(u^2 - u + 1)^3$
c_2	$(u^2 + u + 1)^3$
c_3	$25(25u^6 - 35u^5 + 29u^4 - 18u^3 + 9u^2 - 4u + 1)$
c_4	$25(25u^6 - 20u^5 + 21u^4 - 6u^3 + 5u^2 - u + 1)$
c_6	$(u^3 + u^2 - 1)^2$
c_7, c_8	$(u^3 - u^2 + 2u - 1)^2$
c_9	u^6
c_{10}	$(u^3 - u^2 + 1)^2$
c_{11}, c_{12}	$(u^3 + u^2 + 2u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_5	$(y^2+y+1)^3$
c_3	$625(625y^6+225y^5+31y^4-32y^3-5y^2+2y+1)$
c_4	$625(625y^6+650y^5+451y^4+184y^3+55y^2+9y+1)$
c_6, c_{10}	$(y^3-y^2+2y-1)^2$
c_7, c_8, c_{11} c_{12}	$(y^3+3y^2+2y-1)^2$
c_9	y^6

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.500000 + 0.866025I$ $a = -0.858302 - 0.653743I$ $b = 0.754878$	$-1.11345 + 2.02988I$	$-12.07771 - 2.86462I$
$u = 0.500000 + 0.866025I$ $a = 0.434082 + 1.056380I$ $b = -0.877439 - 0.744862I$	$3.02413 - 0.79824I$	$-2.61844 - 4.09859I$
$u = 0.500000 + 0.866025I$ $a = 1.72422 + 0.46339I$ $b = -0.877439 + 0.744862I$	$3.02413 + 4.85801I$	$-1.92384 - 9.69912I$
$u = 0.500000 - 0.866025I$ $a = -0.858302 + 0.653743I$ $b = 0.754878$	$-1.11345 - 2.02988I$	$-12.07771 + 2.86462I$
$u = 0.500000 - 0.866025I$ $a = 0.434082 - 1.056380I$ $b = -0.877439 + 0.744862I$	$3.02413 + 0.79824I$	$-2.61844 + 4.09859I$
$u = 0.500000 - 0.866025I$ $a = 1.72422 - 0.46339I$ $b = -0.877439 - 0.744862I$	$3.02413 - 4.85801I$	$-1.92384 + 9.69912I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^3)(u^{77}+26u^{76}+\cdots+4801u-625)$
c_2	$((u^2+u+1)^3)(u^{77}+4u^{76}+\cdots+101u+25)$
c_3	$625(25u^6-35u^5+29u^4-18u^3+9u^2-4u+1)$ $\cdot(25u^{77}-140u^{76}+\cdots-18715176u+4199891)$
c_4	$625(25u^6-20u^5+21u^4-6u^3+5u^2-u+1)$ $\cdot(25u^{77}-45u^{76}+\cdots+49984u+52544)$
c_5	$((u^2-u+1)^3)(u^{77}+4u^{76}+\cdots+101u+25)$
c_6	$((u^3+u^2-1)^2)(u^{77}+3u^{76}+\cdots-8u^2+1)$
c_7, c_8	$((u^3-u^2+2u-1)^2)(u^{77}-3u^{76}+\cdots-6u+1)$
c_9	$u^6(u^{77}+u^{76}+\cdots+15200u+8000)$
c_{10}	$((u^3-u^2+1)^2)(u^{77}+3u^{76}+\cdots-8u^2+1)$
c_{11}, c_{12}	$((u^3+u^2+2u+1)^2)(u^{77}-3u^{76}+\cdots-6u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^2+y+1)^3)(y^{77}+54y^{76}+\cdots+2.64860\times 10^8 y-390625)$
c_2, c_5	$((y^2+y+1)^3)(y^{77}+26y^{76}+\cdots+4801y-625)$
c_3	$390625(625y^6+225y^5+31y^4-32y^3-5y^2+2y+1)$ $\cdot(625y^{77}+32100y^{76}+\cdots-165791891422930y-17639084411881)$
c_4	$390625(625y^6+650y^5+451y^4+184y^3+55y^2+9y+1)$ $\cdot(625y^{77}+30025y^{76}+\cdots-45608364032y-2760871936)$
c_6, c_{10}	$((y^3-y^2+2y-1)^2)(y^{77}+49y^{76}+\cdots+16y-1)$
c_7, c_8, c_{11} c_{12}	$((y^3+3y^2+2y-1)^2)(y^{77}+93y^{76}+\cdots+16y-1)$
c_9	$y^6(y^{77}+35y^{76}+\cdots-9.64480\times 10^8 y-6.40000\times 10^7)$