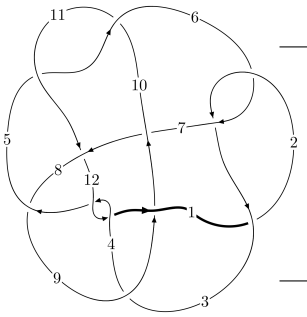
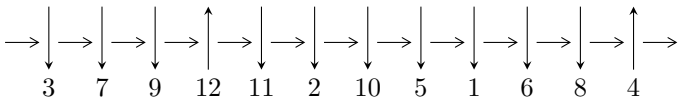
$12a_{0611}$ $(K12a_{0611})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u &= \langle 9.13312 \times 10^{361} u^{148} - 1.51853 \times 10^{362} u^{147} + \cdots + 8.68141 \times 10^{362} b - 9.20259 \times 10^{363}, \\
&\quad 4.19476 \times 10^{364} u^{148} - 8.08613 \times 10^{364} u^{147} + \cdots + 1.61474 \times 10^{365} a + 3.78553 \times 10^{366}, \\
&\quad u^{149} - 2u^{148} + \cdots + 105u + 93 \rangle \\
I_2^u &= \langle 54u^{27} - 138u^{26} + \cdots + 13b - 174,\ -36u^{27} + 40u^{26} + \cdots + 13a + 25,\ u^{28} - 2u^{27} + \cdots - 3u + 1 \rangle \\
I_3^u &= \langle b - a - 1,\ a^3 + 4a^2 + 7a + 5,\ u + 1 \rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 180 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. $\boldsymbol{I_1^u = \langle 9.13 \times 10^{361} u^{148} - 1.52 \times 10^{362} u^{147} + \cdots + 8.68 \times 10^{362} b - 9.20 \times 10^{363},\ 4.19 \times 10^{364} u^{148} - 8.09 \times 10^{364} u^{147} + \cdots + 1.61 \times 10^{365} a + 3.79 \times 10^{366},\ u^{149} - 2u^{148} + \cdots + 105u + 93 \rangle}$

(i) Arc colorings

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

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

$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -0.259779u^{148} + 0.500769u^{147} + \cdots - 15.1768u - 23.4436 \\ -0.105203u^{148} + 0.174917u^{147} + \cdots + 90.1082u + 10.6003 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.00360016u^{148} - 0.0517405u^{147} + \cdots + 141.346u + 47.5754 \\ -0.0929461u^{148} + 0.00270813u^{147} + \cdots + 16.2736u - 0.477362 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.154576u^{148} + 0.325852u^{147} + \cdots - 105.285u - 34.0439 \\ -0.105203u^{148} + 0.174917u^{147} + \cdots + 90.1082u + 10.6003 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0468139u^{148} + 0.0510239u^{147} + \cdots + 61.5072u + 23.2256 \\ -0.0175283u^{148} - 0.125085u^{147} + \cdots + 5.97799u - 1.90294 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0459520u^{148} + 0.0568612u^{147} + \cdots - 77.0611u - 35.6329 \\ 0.00726844u^{148} + 0.0815554u^{147} + \cdots - 46.9332u - 22.2944 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0162594u^{148} - 0.201415u^{147} + \cdots - 20.2519u + 16.5162 \\ 0.223761u^{148} - 0.411051u^{147} + \cdots - 58.8642u - 17.8281 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.325654u^{148} + 0.818894u^{147} + \cdots - 17.3532u - 13.0768 \\ -0.102726u^{148} + 0.0936566u^{147} + \cdots + 97.3876u + 9.56960 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.688479u^{148} + 1.43565u^{147} + \cdots + 375.146u + 114.095$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{149} + 56u^{148} + \cdots + 296535u + 8649$
c_2, c_6	$u^{149} - 2u^{148} + \cdots + 105u + 93$
c_3	$u^{149} - u^{148} + \cdots + 2245u + 181$
c_4, c_{12}	$u^{149} + 6u^{148} + \cdots + 79u + 1$
c_5, c_{10}	$u^{149} + 2u^{148} + \cdots - 3779u + 113$
c_7	$u^{149} + 10u^{148} + \cdots + 30325383u + 3181516$
c_8	$u^{149} + 5u^{148} + \cdots + 1104u + 48$
c_9	$u^{149} + 8u^{148} + \cdots + 15407u + 3844$
c_{11}	$u^{149} - 3u^{148} + \cdots + 7u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{149} + 72y^{148} + \cdots + 8853694299y - 74805201$
c_2, c_6	$y^{149} - 56y^{148} + \cdots + 296535y - 8649$
c_3	$y^{149} - 3y^{148} + \cdots + 466517y - 32761$
c_4, c_{12}	$y^{149} + 110y^{148} + \cdots + 709y - 1$
c_5, c_{10}	$y^{149} + 114y^{148} + \cdots - 5658461y - 12769$
c_7	$y^{149} + 40y^{148} + \cdots + 174252360290745y - 10122044058256$
c_8	$y^{149} + 7y^{148} + \cdots - 180096y - 2304$
c_9	$y^{149} - 20y^{148} + \cdots + 533917185y - 14776336$
c_{11}	$y^{149} - 5y^{148} + \cdots - 2703y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.968469 + 0.235445I$ $a = 0.383733 + 0.623501I$ $b = 0.403217 - 0.178671I$	$-4.22553 + 2.20818I$	0
$u = 0.968469 - 0.235445I$ $a = 0.383733 - 0.623501I$ $b = 0.403217 + 0.178671I$	$-4.22553 - 2.20818I$	0
$u = -0.640300 + 0.772807I$ $a = 0.803379 - 0.344187I$ $b = 0.331748 + 1.047570I$	$-0.04142 - 4.05732I$	0
$u = -0.640300 - 0.772807I$ $a = 0.803379 + 0.344187I$ $b = 0.331748 - 1.047570I$	$-0.04142 + 4.05732I$	0
$u = 0.699565 + 0.704970I$ $a = 1.069920 - 0.219227I$ $b = 0.805668 + 0.420642I$	$-1.96563 - 0.24185I$	0
$u = 0.699565 - 0.704970I$ $a = 1.069920 + 0.219227I$ $b = 0.805668 - 0.420642I$	$-1.96563 + 0.24185I$	0
$u = -0.827837 + 0.589865I$ $a = -1.04994 - 1.25770I$ $b = -1.159570 - 0.123204I$	$-0.36402 + 4.16944I$	0
$u = -0.827837 - 0.589865I$ $a = -1.04994 + 1.25770I$ $b = -1.159570 + 0.123204I$	$-0.36402 - 4.16944I$	0
$u = -0.824013 + 0.527857I$ $a = 0.747555 + 0.400726I$ $b = 0.832215 + 0.164773I$	$-0.365322 + 0.476907I$	0
$u = -0.824013 - 0.527857I$ $a = 0.747555 - 0.400726I$ $b = 0.832215 - 0.164773I$	$-0.365322 - 0.476907I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.526498+0.875430I$ $a=\ \ 0.107153+0.304455I$ $b=-0.590870-0.185138I$	$-2.59432+4.59273I$	0
$u=-0.526498-0.875430I$ $a=\ \ 0.107153-0.304455I$ $b=-0.590870+0.185138I$	$-2.59432-4.59273I$	0
$u=\ \ 0.714566+0.734165I$ $a=\ \ 0.286501-0.302094I$ $b=-0.091309+1.350030I$	$4.81717-1.31981I$	0
$u=\ \ 0.714566-0.734165I$ $a=\ \ 0.286501+0.302094I$ $b=-0.091309-1.350030I$	$4.81717+1.31981I$	0
$u=-0.984794+0.282534I$ $a=-1.53905-1.13501I$ $b=-0.413838+0.070302I$	$-7.05553+0.84983I$	0
$u=-0.984794-0.282534I$ $a=-1.53905+1.13501I$ $b=-0.413838-0.070302I$	$-7.05553-0.84983I$	0
$u=-0.825747+0.609487I$ $a=\ \ 0.918486+0.460716I$ $b=\ \ 0.950081-0.016109I$	$-0.392806+0.526558I$	0
$u=-0.825747-0.609487I$ $a=\ \ 0.918486-0.460716I$ $b=\ \ 0.950081+0.016109I$	$-0.392806-0.526558I$	0
$u=\ \ 0.860642+0.568093I$ $a=-1.84264+0.93586I$ $b=-0.07523-1.64011I$	$-1.09307-2.26272I$	0
$u=\ \ 0.860642-0.568093I$ $a=-1.84264-0.93586I$ $b=-0.07523+1.64011I$	$-1.09307+2.26272I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.803588+0.649713I$ $a=-0.419576-0.160156I$ $b=\ \ 0.42860+1.59171I$	$6.18278-0.66023I$	0
$u=-0.803588-0.649713I$ $a=-0.419576+0.160156I$ $b=\ \ 0.42860-1.59171I$	$6.18278+0.66023I$	0
$u=-0.515537+0.811811I$ $a=-0.195761-0.402466I$ $b=-1.030710-0.273295I$	$-2.71841-8.19281I$	0
$u=-0.515537-0.811811I$ $a=-0.195761+0.402466I$ $b=-1.030710+0.273295I$	$-2.71841+8.19281I$	0
$u=\ \ 0.749923+0.720134I$ $a=\ \ 0.1159100+0.0441175I$ $b=\ \ 0.50626-1.40796I$	$4.11574+5.05670I$	0
$u=\ \ 0.749923-0.720134I$ $a=\ \ 0.1159100-0.0441175I$ $b=\ \ 0.50626+1.40796I$	$4.11574-5.05670I$	0
$u=\ \ 0.843931+0.621675I$ $a=-0.75324-1.33079I$ $b=\ \ 0.016408+1.258060I$	$2.04435-7.80962I$	0
$u=\ \ 0.843931-0.621675I$ $a=-0.75324+1.33079I$ $b=\ \ 0.016408-1.258060I$	$2.04435+7.80962I$	0
$u=\ \ 0.614857+0.707173I$ $a=\ \ 0.657947-0.495014I$ $b=-0.0235396-0.0419572I$	$3.04411-0.49008I$	0
$u=\ \ 0.614857-0.707173I$ $a=\ \ 0.657947+0.495014I$ $b=-0.0235396+0.0419572I$	$3.04411+0.49008I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.061270 + 0.060244I$ $a = -1.56436 - 1.28089I$ $b = -0.363717 - 0.882385I$	$-5.88809 - 3.57709I$	0
$u = 1.061270 - 0.060244I$ $a = -1.56436 + 1.28089I$ $b = -0.363717 + 0.882385I$	$-5.88809 + 3.57709I$	0
$u = -1.038870 + 0.233922I$ $a = 1.79709 - 0.52310I$ $b = 0.82029 - 1.51104I$	$-3.99947 - 0.27695I$	0
$u = -1.038870 - 0.233922I$ $a = 1.79709 + 0.52310I$ $b = 0.82029 + 1.51104I$	$-3.99947 + 0.27695I$	0
$u = 0.911782 + 0.199111I$ $a = -1.76696 + 0.52732I$ $b = -0.383269 - 0.466773I$	$-3.26613 - 0.66224I$	0
$u = 0.911782 - 0.199111I$ $a = -1.76696 - 0.52732I$ $b = -0.383269 + 0.466773I$	$-3.26613 + 0.66224I$	0
$u = -0.833825 + 0.667958I$ $a = 0.038318 + 1.117750I$ $b = 0.014891 - 1.310330I$	$6.50540 + 4.42575I$	0
$u = -0.833825 - 0.667958I$ $a = 0.038318 - 1.117750I$ $b = 0.014891 + 1.310330I$	$6.50540 - 4.42575I$	0
$u = 0.500409 + 0.945676I$ $a = 0.234386 + 0.299924I$ $b = 0.093036 - 1.298950I$	$4.79305 + 4.31248I$	0
$u = 0.500409 - 0.945676I$ $a = 0.234386 - 0.299924I$ $b = 0.093036 + 1.298950I$	$4.79305 - 4.31248I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.867238+0.630962I$		
$a=$	$2.95975-0.34566I$	$1.96855+2.90153I$	0
$b=$	$0.014521+1.147190I$		
$u=$	$0.867238-0.630962I$		
$a=$	$2.95975+0.34566I$	$1.96855-2.90153I$	0
$b=$	$0.014521-1.147190I$		
$u=$	$0.567008+0.718904I$		
$a=$	$0.505387+0.378998I$	$3.89964+3.17460I$	0
$b=$	$0.278342-1.278840I$		
$u=$	$0.567008-0.718904I$		
$a=$	$0.505387-0.378998I$	$3.89964-3.17460I$	0
$b=$	$0.278342+1.278840I$		
$u=$	$0.238710+1.060760I$		
$a=$	$-0.143371+0.495180I$	$0.56832-8.02901I$	0
$b=$	$-0.307023-1.200370I$		
$u=$	$0.238710-1.060760I$		
$a=$	$-0.143371-0.495180I$	$0.56832+8.02901I$	0
$b=$	$-0.307023+1.200370I$		
$u=$	$-0.819821+0.379396I$		
$a=$	$0.067222-1.404120I$	$-2.14758+1.53177I$	0
$b=$	$-0.239208-1.269010I$		
$u=$	$-0.819821-0.379396I$		
$a=$	$0.067222+1.404120I$	$-2.14758-1.53177I$	0
$b=$	$-0.239208+1.269010I$		
$u=$	$-0.873328+0.666062I$		
$a=$	$2.19574+0.68805I$	$6.38250+0.73820I$	0
$b=$	$0.040551-1.210860I$		
$u=$	$-0.873328-0.666062I$		
$a=$	$2.19574-0.68805I$	$6.38250-0.73820I$	0
$b=$	$0.040551+1.210860I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.725927 + 0.532040I$ $a = -1.75987 + 1.43543I$ $b = -1.23148 - 0.86374I$	$-1.11262 + 1.56706I$	0
$u = 0.725927 - 0.532040I$ $a = -1.75987 - 1.43543I$ $b = -1.23148 + 0.86374I$	$-1.11262 - 1.56706I$	0
$u = -0.897190 + 0.643875I$ $a = -2.22087 - 0.45588I$ $b = -0.56215 + 1.55242I$	$5.89079 + 5.70043I$	0
$u = -0.897190 - 0.643875I$ $a = -2.22087 + 0.45588I$ $b = -0.56215 - 1.55242I$	$5.89079 - 5.70043I$	0
$u = -0.890316 + 0.017945I$ $a = -2.60379 + 0.26146I$ $b = -0.392707 + 0.637237I$	$-6.79021 - 0.20713I$	0
$u = -0.890316 - 0.017945I$ $a = -2.60379 - 0.26146I$ $b = -0.392707 - 0.637237I$	$-6.79021 + 0.20713I$	0
$u = -0.932068 + 0.607658I$ $a = -1.013830 - 0.869016I$ $b = -0.824781 - 0.198469I$	$-0.81078 + 4.17939I$	0
$u = -0.932068 - 0.607658I$ $a = -1.013830 + 0.869016I$ $b = -0.824781 + 0.198469I$	$-0.81078 - 4.17939I$	0
$u = -0.581970 + 0.662107I$ $a = 1.079050 + 0.529205I$ $b = 0.154195 + 0.355303I$	$-0.18459 - 3.31040I$	0
$u = -0.581970 - 0.662107I$ $a = 1.079050 - 0.529205I$ $b = 0.154195 - 0.355303I$	$-0.18459 + 3.31040I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.597549 + 0.946086I$ $a = -0.149820 - 0.476322I$ $b = -0.45150 + 1.43955I$	$2.62701 + 13.48410I$	0
$u = 0.597549 - 0.946086I$ $a = -0.149820 + 0.476322I$ $b = -0.45150 - 1.43955I$	$2.62701 - 13.48410I$	0
$u = 0.999991 + 0.505277I$ $a = -1.56552 + 0.73591I$ $b = -0.758163 - 0.086571I$	$-5.60923 - 5.18227I$	0
$u = 0.999991 - 0.505277I$ $a = -1.56552 - 0.73591I$ $b = -0.758163 + 0.086571I$	$-5.60923 + 5.18227I$	0
$u = 0.562830 + 0.973738I$ $a = 0.254441 - 0.359420I$ $b = -0.441300 + 1.329930I$	$4.87071 + 0.96015I$	0
$u = 0.562830 - 0.973738I$ $a = 0.254441 + 0.359420I$ $b = -0.441300 - 1.329930I$	$4.87071 - 0.96015I$	0
$u = 0.970380 + 0.578531I$ $a = 0.029044 - 1.106320I$ $b = 1.23939 - 1.14368I$	$-1.94153 - 6.07820I$	0
$u = 0.970380 - 0.578531I$ $a = 0.029044 + 1.106320I$ $b = 1.23939 + 1.14368I$	$-1.94153 + 6.07820I$	0
$u = -0.950671 + 0.614865I$ $a = 0.181077 - 0.723377I$ $b = -0.188758 - 0.664537I$	$-2.68142 + 2.27315I$	0
$u = -0.950671 - 0.614865I$ $a = 0.181077 + 0.723377I$ $b = -0.188758 + 0.664537I$	$-2.68142 - 2.27315I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.607121+0.955843I$ $a=\ \ 0.009086+0.436225I$ $b=-0.43896-1.43616I$	$7.64389-7.71873I$	0
$u=-0.607121-0.955843I$ $a=\ \ 0.009086-0.436225I$ $b=-0.43896+1.43616I$	$7.64389+7.71873I$	0
$u=\ \ 0.861830+0.755597I$ $a=\ \ 1.05570-1.28169I$ $b=-0.008367+1.410760I$	$3.04492-2.85129I$	0
$u=\ \ 0.861830-0.755597I$ $a=\ \ 1.05570+1.28169I$ $b=-0.008367-1.410760I$	$3.04492+2.85129I$	0
$u=\ \ 0.460807+0.716338I$ $a=\ \ 0.164770+0.604121I$ $b=-0.971591+0.391045I$	$2.10180+2.59496I$	0
$u=\ \ 0.460807-0.716338I$ $a=\ \ 0.164770-0.604121I$ $b=-0.971591-0.391045I$	$2.10180-2.59496I$	0
$u=-1.149290+0.015829I$ $a=-0.663955+1.141830I$ $b=-0.146722+0.995766I$	$-1.61096+1.80364I$	0
$u=-1.149290-0.015829I$ $a=-0.663955-1.141830I$ $b=-0.146722-0.995766I$	$-1.61096-1.80364I$	0
$u=\ \ 0.942839+0.683725I$ $a=-2.18636+0.31917I$ $b=-0.59925-1.36812I$	$3.52814-10.43200I$	0
$u=\ \ 0.942839-0.683725I$ $a=-2.18636-0.31917I$ $b=-0.59925+1.36812I$	$3.52814+10.43200I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$1.173640+0.007990I$		
$a=$	$1.60365+0.16513I$	$-8.69998-6.47204I$	0
$b=$	$1.039920-0.069467I$		
$u=$	$1.173640-0.007990I$		
$a=$	$1.60365-0.16513I$	$-8.69998+6.47204I$	0
$b=$	$1.039920+0.069467I$		
$u=$	$-0.861892+0.803184I$		
$a=$	$0.883255+0.278665I$	$5.03455+2.98722I$	0
$b=$	$0.04406-1.46040I$		
$u=$	$-0.861892-0.803184I$		
$a=$	$0.883255-0.278665I$	$5.03455-2.98722I$	0
$b=$	$0.04406+1.46040I$		
$u=$	$0.948334+0.700138I$		
$a=$	$1.55327-0.21159I$	$4.13419-4.14616I$	0
$b=$	$0.209534+1.274200I$		
$u=$	$0.948334-0.700138I$		
$a=$	$1.55327+0.21159I$	$4.13419+4.14616I$	0
$b=$	$0.209534-1.274200I$		
$u=$	$0.971391+0.669796I$		
$a=$	$-0.716778+0.992318I$	$-2.78028-5.05494I$	0
$b=$	$-0.799521+0.533351I$		
$u=$	$0.971391-0.669796I$		
$a=$	$-0.716778-0.992318I$	$-2.78028+5.05494I$	0
$b=$	$-0.799521-0.533351I$		
$u=$	$-1.180020+0.119174I$		
$a=$	$1.41531+0.05869I$	$-2.98345-0.49214I$	0
$b=$	$1.187370-0.427900I$		
$u=$	$-1.180020-0.119174I$		
$a=$	$1.41531-0.05869I$	$-2.98345+0.49214I$	0
$b=$	$1.187370+0.427900I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.804737+0.079022I$ $a=-0.76566+3.04846I$ $b=-0.376812+1.038960I$	$-0.70905+6.44985I$	0
$u=-0.804737-0.079022I$ $a=-0.76566-3.04846I$ $b=-0.376812-1.038960I$	$-0.70905-6.44985I$	0
$u=-1.051190+0.568569I$ $a=-2.46626+0.21894I$ $b=-0.330082+1.325630I$	$-1.17272+9.13022I$	0
$u=-1.051190-0.568569I$ $a=-2.46626-0.21894I$ $b=-0.330082-1.325630I$	$-1.17272-9.13022I$	0
$u=-1.028040+0.618874I$ $a=-1.122520+0.269340I$ $b=-0.283854+0.113261I$	$-1.51137+8.33438I$	0
$u=-1.028040-0.618874I$ $a=-1.122520-0.269340I$ $b=-0.283854-0.113261I$	$-1.51137-8.33438I$	0
$u=1.014040+0.644530I$ $a=-0.516228-0.108633I$ $b=-0.181105+0.157182I$	$1.86184-4.72156I$	0
$u=1.014040-0.644530I$ $a=-0.516228+0.108633I$ $b=-0.181105-0.157182I$	$1.86184+4.72156I$	0
$u=1.189850+0.234820I$ $a=-0.19095+1.54067I$ $b=-0.214967+1.241180I$	$-3.39478+1.71880I$	0
$u=1.189850-0.234820I$ $a=-0.19095-1.54067I$ $b=-0.214967-1.241180I$	$-3.39478-1.71880I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.165846 + 1.203060I$ $a = 0.147753 - 0.384742I$ $b = -0.291666 + 1.055690I$	$4.33122 + 1.41234I$	0
$u = 0.165846 - 1.203060I$ $a = 0.147753 + 0.384742I$ $b = -0.291666 - 1.055690I$	$4.33122 - 1.41234I$	0
$u = 1.033890 + 0.656471I$ $a = -2.15557 + 0.11941I$ $b = -0.363230 - 1.238360I$	$2.55084 - 8.47427I$	0
$u = 1.033890 - 0.656471I$ $a = -2.15557 - 0.11941I$ $b = -0.363230 + 1.238360I$	$2.55084 + 8.47427I$	0
$u = -1.020290 + 0.687779I$ $a = -2.22221 - 0.30179I$ $b = -0.395392 + 1.046340I$	$-1.17836 + 9.59719I$	0
$u = -1.020290 - 0.687779I$ $a = -2.22221 + 0.30179I$ $b = -0.395392 - 1.046340I$	$-1.17836 - 9.59719I$	0
$u = -0.665463 + 0.386185I$ $a = 1.29096 - 0.96390I$ $b = 0.238934 + 1.338060I$	$0.45166 - 4.89782I$	0
$u = -0.665463 - 0.386185I$ $a = 1.29096 + 0.96390I$ $b = 0.238934 - 1.338060I$	$0.45166 + 4.89782I$	0
$u = 1.061740 + 0.623629I$ $a = 1.25544 - 0.79404I$ $b = 1.292730 + 0.408847I$	$0.40304 - 7.73345I$	0
$u = 1.061740 - 0.623629I$ $a = 1.25544 + 0.79404I$ $b = 1.292730 - 0.408847I$	$0.40304 + 7.73345I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.643284+1.058080I$ $a=-0.001010-0.458889I$ $b=\ 0.003974+1.201920I$	$6.53065+0.60390I$	0
$u=-0.643284-1.058080I$ $a=-0.001010+0.458889I$ $b=\ 0.003974-1.201920I$	$6.53065-0.60390I$	0
$u=\ 0.936650+0.837252I$ $a=-0.871265+1.072860I$ $b=-0.058389-1.083000I$	$-1.54680-3.16007I$	0
$u=\ 0.936650-0.837252I$ $a=-0.871265-1.072860I$ $b=-0.058389+1.083000I$	$-1.54680+3.16007I$	0
$u=\ 1.234500+0.235107I$ $a=\ 1.123610+0.635376I$ $b=\ 0.527835+1.164210I$	$-0.30543-6.28674I$	0
$u=\ 1.234500-0.235107I$ $a=\ 1.123610-0.635376I$ $b=\ 0.527835-1.164210I$	$-0.30543+6.28674I$	0
$u=-1.072910+0.659837I$ $a=\ 1.21050+0.84701I$ $b=\ 1.187950-0.267207I$	$-4.3673+13.7028I$	0
$u=-1.072910-0.659837I$ $a=\ 1.21050-0.84701I$ $b=\ 1.187950+0.267207I$	$-4.3673-13.7028I$	0
$u=-1.253330+0.163558I$ $a=\ 1.17912-0.87744I$ $b=\ 0.500708-1.266040I$	$-4.97787+11.87120I$	0
$u=-1.253330-0.163558I$ $a=\ 1.17912+0.87744I$ $b=\ 0.500708+1.266040I$	$-4.97787-11.87120I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.264200+0.075184I$ $a=-0.223177-1.178110I$ $b=-0.059435-1.133950I$	$-1.76421-1.70214I$	0
$u=-1.264200-0.075184I$ $a=-0.223177+1.178110I$ $b=-0.059435+1.133950I$	$-1.76421+1.70214I$	0
$u=0.709899+0.072206I$ $a=0.13391+2.74398I$ $b=-0.449164+1.066840I$	$2.96754+2.18336I$	$-8.00000+0.I$
$u=0.709899-0.072206I$ $a=0.13391-2.74398I$ $b=-0.449164-1.066840I$	$2.96754-2.18336I$	$-8.00000+0.I$
$u=-1.127320+0.638697I$ $a=0.877585+0.557578I$ $b=0.707134-0.517601I$	$-4.52310+1.15261I$	0
$u=-1.127320-0.638697I$ $a=0.877585-0.557578I$ $b=0.707134+0.517601I$	$-4.52310-1.15261I$	0
$u=1.101310+0.733113I$ $a=1.92544-0.34871I$ $b=0.50246+1.47193I$	$1.0578-19.6388I$	0
$u=1.101310-0.733113I$ $a=1.92544+0.34871I$ $b=0.50246-1.47193I$	$1.0578+19.6388I$	0
$u=-1.098440+0.738903I$ $a=1.78989+0.33577I$ $b=0.50902-1.48381I$	$6.1066+13.9156I$	0
$u=-1.098440-0.738903I$ $a=1.78989-0.33577I$ $b=0.50902+1.48381I$	$6.1066-13.9156I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.109150 + 0.729914I$ $a = 1.55004 - 0.34417I$ $b = 0.58869 + 1.47910I$	$3.18570 - 7.14451I$	0
$u = 1.109150 - 0.729914I$ $a = 1.55004 + 0.34417I$ $b = 0.58869 - 1.47910I$	$3.18570 + 7.14451I$	0
$u = 1.139870 + 0.700164I$ $a = -1.59884 - 0.17219I$ $b = -0.186583 - 1.287450I$	$2.83189 - 10.33880I$	0
$u = 1.139870 - 0.700164I$ $a = -1.59884 + 0.17219I$ $b = -0.186583 + 1.287450I$	$2.83189 + 10.33880I$	0
$u = -0.361611 + 0.551503I$ $a = 0.926048 + 0.058500I$ $b = 0.186060 - 0.885008I$	$-1.46722 + 2.05893I$	$-8.00000 - 4.28910I$
$u = -0.361611 - 0.551503I$ $a = 0.926048 - 0.058500I$ $b = 0.186060 + 0.885008I$	$-1.46722 - 2.05893I$	$-8.00000 + 4.28910I$
$u = -1.113840 + 0.785512I$ $a = -1.284420 - 0.169168I$ $b = -0.117359 + 1.204010I$	$5.00915 + 6.01263I$	0
$u = -1.113840 - 0.785512I$ $a = -1.284420 + 0.169168I$ $b = -0.117359 - 1.204010I$	$5.00915 - 6.01263I$	0
$u = -0.174999 + 0.606651I$ $a = 0.767731 - 0.082329I$ $b = 0.277428 + 1.328150I$	$0.79983 - 4.72707I$	$-8.00000 + 2.09306I$
$u = -0.174999 - 0.606651I$ $a = 0.767731 + 0.082329I$ $b = 0.277428 - 1.328150I$	$0.79983 + 4.72707I$	$-8.00000 - 2.09306I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.312960 + 0.394512I$ $a = -0.310322 - 0.509199I$ $b = 0.220353 - 1.002420I$	$-3.31466 + 2.45716I$	0
$u = 1.312960 - 0.394512I$ $a = -0.310322 + 0.509199I$ $b = 0.220353 + 1.002420I$	$-3.31466 - 2.45716I$	0
$u = 0.252749 + 0.495463I$ $a = 1.043130 - 0.075032I$ $b = 0.679083 - 0.148121I$	$-3.82044 + 1.25455I$	$-12.08684 - 1.42676I$
$u = 0.252749 - 0.495463I$ $a = 1.043130 + 0.075032I$ $b = 0.679083 + 0.148121I$	$-3.82044 - 1.25455I$	$-12.08684 + 1.42676I$
$u = 0.449633 + 0.024802I$ $a = 1.208180 - 0.053232I$ $b = 0.210753 - 1.353780I$	$3.78005 + 2.39489I$	$-11.26854 - 5.10796I$
$u = 0.449633 - 0.024802I$ $a = 1.208180 + 0.053232I$ $b = 0.210753 + 1.353780I$	$3.78005 - 2.39489I$	$-11.26854 + 5.10796I$
$u = -0.115718 + 0.315616I$ $a = 3.08929 + 0.97798I$ $b = -0.472676 - 0.841492I$	$-1.23622 + 2.57639I$	$-8.68114 + 0.09957I$
$u = -0.115718 - 0.315616I$ $a = 3.08929 - 0.97798I$ $b = -0.472676 + 0.841492I$	$-1.23622 - 2.57639I$	$-8.68114 - 0.09957I$
$u = -0.331795$ $a = 0.980558$ $b = 0.461666$	-0.718264	-13.7590

II. $I_2^u = \langle 54u^{27} - 138u^{26} + \cdots + 13b - 174,\ -36u^{27} + 40u^{26} + \cdots + 13a + 25,\ u^{28} - 2u^{27} + \cdots - 3u + 1\rangle$

(i) Arc colorings

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

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

$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} 2.76923u^{27} - 3.07692u^{26} + \cdots + 8.84615u - 1.92308 \\ -4.15385u^{27} + 10.6154u^{26} + \cdots - 22.7692u + 13.3846 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -2.46154u^{27} + 1.76923u^{26} + \cdots - 1.69231u - 5.76923 \\ -1.92308u^{27} + 2.76923u^{26} + \cdots - 9.23077u + 3.23077 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 6.92308u^{27} - 13.6923u^{26} + \cdots + 31.6154u - 15.3077 \\ -4.15385u^{27} + 10.6154u^{26} + \cdots - 22.7692u + 13.3846 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -8.92308u^{27} + 8.84615u^{26} + \cdots - 13.8462u - 1.84615 \\ 5.30769u^{27} - 7.46154u^{26} + \cdots + 9.38462u - 1.53846 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1.07692u^{27} + 2.92308u^{26} + \cdots - 14.4615u + 12.0769 \\ 4.84615u^{27} - 8.76923u^{26} + \cdots + 21.3077u - 9.23077 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 3.69231u^{27} - 6.23077u^{26} + \cdots + 18.1538u - 5.76923 \\ 4.15385u^{27} - 3.69231u^{26} + \cdots + 8.38462u - 0.307692 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.769231u^{27} - 1.07692u^{26} + \cdots + 5.84615u - 0.923077 \\ -4.15385u^{27} + 10.6154u^{26} + \cdots - 22.7692u + 13.3846 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{189}{13}u^{27} - \frac{19}{13}u^{26} + \cdots + \frac{353}{13}u + \frac{45}{13}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{28} - 10u^{27} + \cdots - 7u + 1$
c_2	$u^{28} + 2u^{27} + \cdots + 3u + 1$
c_3	$u^{28} + 2u^{27} + \cdots + 9u + 1$
c_4	$u^{28} - 2u^{27} + \cdots - 16u + 1$
c_5	$u^{28} + 11u^{26} + \cdots + 8u + 1$
c_6	$u^{28} - 2u^{27} + \cdots - 3u + 1$
c_7	$u^{28} - 10u^{27} + \cdots - 12u + 1$
c_8	$u^{28} - u^{26} + \cdots - 85u + 23$
c_9	$u^{28} + 2u^{27} + \cdots + 3u + 1$
c_{10}	$u^{28} + 11u^{26} + \cdots - 8u + 1$
c_{11}	$u^{28} - 3u^{27} + \cdots + 6u + 1$
c_{12}	$u^{28} + 2u^{27} + \cdots + 16u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{28} + 10y^{27} + \cdots + 29y + 1$
c_2, c_6	$y^{28} - 10y^{27} + \cdots - 7y + 1$
c_3	$y^{28} - 10y^{27} + \cdots - 23y + 1$
c_4, c_{12}	$y^{28} + 22y^{27} + \cdots - 86y + 1$
c_5, c_{10}	$y^{28} + 22y^{27} + \cdots + 644y^2 + 1$
c_7	$y^{28} + 22y^{27} + \cdots + 298y + 1$
c_8	$y^{28} - 2y^{27} + \cdots - 8881y + 529$
c_9	$y^{28} - 2y^{27} + \cdots + 19y + 1$
c_{11}	$y^{28} + 3y^{27} + \cdots + 2y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.760265 + 0.600861I$ $a = 1.81899 - 0.75747I$ $b = 0.929502 + 0.677545I$	$-0.593813 + 1.180380I$	$-5.48918 + 0.67459I$
$u = 0.760265 - 0.600861I$ $a = 1.81899 + 0.75747I$ $b = 0.929502 - 0.677545I$	$-0.593813 - 1.180380I$	$-5.48918 - 0.67459I$
$u = 0.870439 + 0.258699I$ $a = -2.20122 + 0.69362I$ $b = -0.113893 - 0.559383I$	$-6.28821 - 1.13742I$	$-10.26503 + 6.20327I$
$u = 0.870439 - 0.258699I$ $a = -2.20122 - 0.69362I$ $b = -0.113893 + 0.559383I$	$-6.28821 + 1.13742I$	$-10.26503 - 6.20327I$
$u = -0.648925 + 0.608694I$ $a = 1.408730 + 0.018404I$ $b = 0.274314 + 1.229080I$	$1.52292 - 5.00456I$	$-4.48925 + 5.03588I$
$u = -0.648925 - 0.608694I$ $a = 1.408730 - 0.018404I$ $b = 0.274314 - 1.229080I$	$1.52292 + 5.00456I$	$-4.48925 - 5.03588I$
$u = -1.089090 + 0.217902I$ $a = -1.258200 + 0.065467I$ $b = -0.694032 + 0.864541I$	$-3.48299 - 0.36994I$	$-13.19690 + 3.88442I$
$u = -1.089090 - 0.217902I$ $a = -1.258200 - 0.065467I$ $b = -0.694032 - 0.864541I$	$-3.48299 + 0.36994I$	$-13.19690 - 3.88442I$
$u = 0.950748 + 0.609511I$ $a = -0.566593 + 0.714378I$ $b = -0.933670 + 0.761819I$	$-1.21458 - 5.97135I$	$-6.68179 + 7.05589I$
$u = 0.950748 - 0.609511I$ $a = -0.566593 - 0.714378I$ $b = -0.933670 - 0.761819I$	$-1.21458 + 5.97135I$	$-6.68179 - 7.05589I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.840887+0.762846I$ $a=\ 0.893824+0.618875I$ $b=\ 0.059961-1.389780I$	$6.36154+2.87201I$	$0.38553-2.61578I$
$u=-0.840887-0.762846I$ $a=\ 0.893824-0.618875I$ $b=\ 0.059961+1.389780I$	$6.36154-2.87201I$	$0.38553+2.61578I$
$u=\ 0.290965+1.097550I$ $a=-0.183539+0.311861I$ $b=\ 0.341399-1.111670I$	$4.52501+1.51102I$	$5.3965-13.4695I$
$u=\ 0.290965-1.097550I$ $a=-0.183539-0.311861I$ $b=\ 0.341399+1.111670I$	$4.52501-1.51102I$	$5.3965+13.4695I$
$u=-0.903958+0.705478I$ $a=-0.327090-0.952997I$ $b=-0.151464-0.117151I$	$-3.59527+2.74601I$	$-16.0232-3.6674I$
$u=-0.903958-0.705478I$ $a=-0.327090+0.952997I$ $b=-0.151464+0.117151I$	$-3.59527-2.74601I$	$-16.0232+3.6674I$
$u=-1.026790+0.621915I$ $a=-2.41992+0.39285I$ $b=-0.303100+1.172980I$	$0.31915+9.92085I$	$-7.25826-10.05573I$
$u=-1.026790-0.621915I$ $a=-2.41992-0.39285I$ $b=-0.303100-1.172980I$	$0.31915-9.92085I$	$-7.25826+10.05573I$
$u=-0.627934+0.449282I$ $a=-0.64144+1.49943I$ $b=\ 0.739917+0.574114I$	$-1.45014+3.44320I$	$-11.08955-6.88902I$
$u=-0.627934-0.449282I$ $a=-0.64144-1.49943I$ $b=\ 0.739917-0.574114I$	$-1.45014-3.44320I$	$-11.08955+6.88902I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.087760 + 0.661338I$ $a = -1.63525 + 0.12340I$ $b = -0.515861 - 1.218870I$	$2.30226 - 7.07429I$	$-8.20571 + 6.17033I$
$u = 1.087760 - 0.661338I$ $a = -1.63525 - 0.12340I$ $b = -0.515861 + 1.218870I$	$2.30226 + 7.07429I$	$-8.20571 - 6.17033I$
$u = 1.247980 + 0.255032I$ $a = 0.209525 + 1.291120I$ $b = -0.154446 + 1.141960I$	$-2.20019 + 2.63616I$	$-7.82989 - 6.93413I$
$u = 1.247980 - 0.255032I$ $a = 0.209525 - 1.291120I$ $b = -0.154446 - 1.141960I$	$-2.20019 - 2.63616I$	$-7.82989 + 6.93413I$
$u = 0.447693 + 0.523289I$ $a = -0.92045 - 1.19003I$ $b = 0.183820 + 1.238340I$	$1.07911 - 6.19329I$	$-6.98103 + 6.04820I$
$u = 0.447693 - 0.523289I$ $a = -0.92045 + 1.19003I$ $b = 0.183820 - 1.238340I$	$1.07911 + 6.19329I$	$-6.98103 - 6.04820I$
$u = 0.481727 + 0.459215I$ $a = -0.177352 - 0.622155I$ $b = 0.337552 - 1.306010I$	$4.36012 + 1.95378I$	$-0.772140 + 0.635821I$
$u = 0.481727 - 0.459215I$ $a = -0.177352 + 0.622155I$ $b = 0.337552 + 1.306010I$	$4.36012 - 1.95378I$	$-0.772140 - 0.635821I$

III. $I_3^u = \langle b-a-1,\ a^3+4a^2+7a+5,\ u+1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} a \\ a+1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} a+1 \\ a+2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1 \\ a+1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} a+1 \\ -a^2-a \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1 \\ -1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} a+2 \\ -a^2-2a-1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} a^2+3a+3 \\ a^2+4a+4 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} a+1 \\ a+2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= a^2+2a-11$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_7 c_9	$(u-1)^3$
c_3	$u^3 - 2u^2 + 3u - 1$
c_4, c_5	$u^3 + u^2 + 2u + 1$
c_6	$(u+1)^3$
c_8	u^3
c_{10}, c_{12}	$u^3 - u^2 + 2u - 1$
c_{11}	$u^3 - u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_7, c_9	$(y-1)^3$
c_3	y^3+2y^2+5y-1
c_4, c_5, c_{10} c_{12}	y^3+3y^2+2y-1
c_8	y^3
c_{11}	y^3-y^2+2y-1

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.00000$ $a=-1.56984$ $b=-0.569840$	-3.28987	-11.6750
$u=-1.00000$ $a=-1.21508+1.30714I$ $b=-0.215080+1.307140I$	-3.28987	$-13.66236-0.56228I$
$u=-1.00000$ $a=-1.21508-1.30714I$ $b=-0.215080-1.307140I$	-3.28987	$-13.66236+0.56228I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^3)(u^{28}-10u^{27}+\cdots-7u+1)$ $\cdot(u^{149}+56u^{148}+\cdots+296535u+8649)$
c_2	$((u-1)^3)(u^{28}+2u^{27}+\cdots+3u+1)(u^{149}-2u^{148}+\cdots+105u+93)$
c_3	$(u^3-2u^2+3u-1)(u^{28}+2u^{27}+\cdots+9u+1)$ $\cdot(u^{149}-u^{148}+\cdots+2245u+181)$
c_4	$(u^3+u^2+2u+1)(u^{28}-2u^{27}+\cdots-16u+1)$ $\cdot(u^{149}+6u^{148}+\cdots+79u+1)$
c_5	$(u^3+u^2+2u+1)(u^{28}+11u^{26}+\cdots+8u+1)$ $\cdot(u^{149}+2u^{148}+\cdots-3779u+113)$
c_6	$((u+1)^3)(u^{28}-2u^{27}+\cdots-3u+1)(u^{149}-2u^{148}+\cdots+105u+93)$
c_7	$((u-1)^3)(u^{28}-10u^{27}+\cdots-12u+1)$ $\cdot(u^{149}+10u^{148}+\cdots+30325383u+3181516)$
c_8	$u^3(u^{28}-u^{26}+\cdots-85u+23)(u^{149}+5u^{148}+\cdots+1104u+48)$
c_9	$((u-1)^3)(u^{28}+2u^{27}+\cdots+3u+1)$ $\cdot(u^{149}+8u^{148}+\cdots+15407u+3844)$
c_{10}	$(u^3-u^2+2u-1)(u^{28}+11u^{26}+\cdots-8u+1)$ $\cdot(u^{149}+2u^{148}+\cdots-3779u+113)$
c_{11}	$(u^3-u^2+1)(u^{28}-3u^{27}+\cdots+6u+1)(u^{149}-3u^{148}+\cdots+7u+1)$
c_{12}	$(u^3-u^2+2u-1)(u^{28}+2u^{27}+\cdots+16u+1)$ $\cdot(u^{149}+6u^{148}+\cdots+79u+1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^3)(y^{28}+10y^{27}+\cdots+29y+1)$ $\cdot(y^{149}+72y^{148}+\cdots+8853694299y-74805201)$
c_2, c_6	$((y-1)^3)(y^{28}-10y^{27}+\cdots-7y+1)$ $\cdot(y^{149}-56y^{148}+\cdots+296535y-8649)$
c_3	$(y^3+2y^2+5y-1)(y^{28}-10y^{27}+\cdots-23y+1)$ $\cdot(y^{149}-3y^{148}+\cdots+466517y-32761)$
c_4, c_{12}	$(y^3+3y^2+2y-1)(y^{28}+22y^{27}+\cdots-86y+1)$ $\cdot(y^{149}+110y^{148}+\cdots+709y-1)$
c_5, c_{10}	$(y^3+3y^2+2y-1)(y^{28}+22y^{27}+\cdots+644y^2+1)$ $\cdot(y^{149}+114y^{148}+\cdots-5658461y-12769)$
c_7	$((y-1)^3)(y^{28}+22y^{27}+\cdots+298y+1)$ $\cdot(y^{149}+40y^{148}+\cdots+174252360290745y-10122044058256)$
c_8	$y^3(y^{28}-2y^{27}+\cdots-8881y+529)$ $\cdot(y^{149}+7y^{148}+\cdots-180096y-2304)$
c_9	$((y-1)^3)(y^{28}-2y^{27}+\cdots+19y+1)$ $\cdot(y^{149}-20y^{148}+\cdots+533917185y-14776336)$
c_{11}	$(y^3-y^2+2y-1)(y^{28}+3y^{27}+\cdots+2y+1)$ $\cdot(y^{149}-5y^{148}+\cdots-2703y-1)$