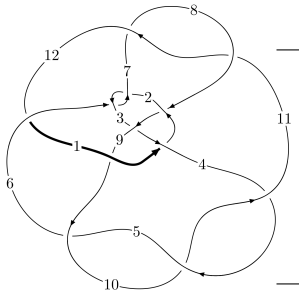
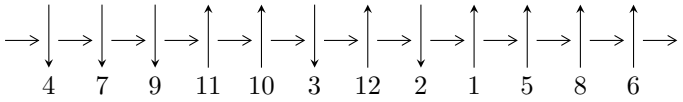
$12a_{1058}$ $(K12a_{1058})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 6.77987 \times 10^{529} u^{151} - 2.60638 \times 10^{530} u^{150} + \cdots + 2.32236 \times 10^{530} b - 7.75568 \times 10^{530},$$
$$4.01232 \times 10^{530} u^{151} - 1.86825 \times 10^{530} u^{150} + \cdots + 6.96708 \times 10^{530} a - 1.05433 \times 10^{532},\ u^{152} - u^{151} + \cdots - 6$$
$$I_2^u = \langle 23135489547260 u^{41} - 791878135073 u^{40} + \cdots + 785779145393 b - 1057448627428,$$
$$- 61366371188204 u^{41} - 63826689923786 u^{40} + \cdots + 3928895726965 a - 80218304578144,$$
$$u^{42} + 23 u^{40} + \cdots + 26 u^2 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 194 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. $\boldsymbol{I_1^u = \langle 6.78 \times 10^{529} u^{151} - 2.61 \times 10^{530} u^{150} + \cdots + 2.32 \times 10^{530} b - 7.76 \times 10^{530},\ 4.01 \times 10^{530} u^{151} - 1.87 \times 10^{530} u^{150} + \cdots + 6.97 \times 10^{530} a - 1.05 \times 10^{532},\ u^{152} - u^{151} + \cdots - 61u + 3 \rangle}$

(i) Arc colorings

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

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

$$a_1 = \begin{pmatrix} -0.575897u^{151} + 0.268154u^{150} + \cdots - 218.578u + 15.1330 \\ -0.291939u^{151} + 1.12230u^{150} + \cdots - 58.3679u + 3.33957 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.188865u^{151} - 0.260558u^{150} + \cdots - 177.254u + 12.7167 \\ -0.542871u^{151} + 1.76489u^{150} + \cdots - 68.1715u + 3.76461 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u \\ u \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} -1.96213u^{151} + 0.333521u^{150} + \cdots - 400.771u + 20.0410 \\ -0.0536691u^{151} + 2.47127u^{150} + \cdots + 3.73527u - 1.95372 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 7.33103u^{151} - 6.16852u^{150} + \cdots + 1895.49u - 129.107 \\ -0.954188u^{151} + 0.712754u^{150} + \cdots + 40.7323u - 2.82961 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.535983u^{151} - 0.784566u^{150} + \cdots + 77.8051u - 8.33785 \\ 0.0700948u^{151} + 0.756951u^{150} + \cdots - 52.3469u + 2.24342 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.203870u^{151} - 0.152271u^{150} + \cdots - 182.925u + 12.7787 \\ -0.638054u^{151} + 1.71099u^{150} + \cdots - 70.1352u + 3.92211 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.487296u^{151} - 0.705863u^{150} + \cdots - 34.0215u - 6.18471 \\ -0.0704317u^{151} + 2.34336u^{150} + \cdots - 31.4761u + 0.0244434 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.0312083u^{151} - 1.55714u^{150} + \cdots - 167.321u + 31.3804$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{152} - 11u^{151} + \cdots + 18140u + 5351$
c_2, c_6	$u^{152} - u^{151} + \cdots + 4353u + 1651$
c_3	$u^{152} - 2u^{151} + \cdots + 87u + 7$
c_4, c_5, c_{10}	$u^{152} + u^{151} + \cdots + 61u + 3$
c_7, c_{11}	$u^{152} + 3u^{151} + \cdots + 61152u + 8128$
c_8	$u^{152} - u^{151} + \cdots + 57030u + 6997$
c_9	$u^{152} - 5u^{151} + \cdots + 176391091u + 46936013$
c_{12}	$u^{152} + u^{151} + \cdots - 347000939u + 62972897$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{152} - 33y^{151} + \cdots - 1604598874y + 28633201$
c_2, c_6	$y^{152} + 83y^{151} + \cdots + 110545925y + 2725801$
c_3	$y^{152} - 10y^{151} + \cdots + 3323y + 49$
c_4, c_5, c_{10}	$y^{152} + 155y^{151} + \cdots + 275y + 9$
c_7, c_{11}	$y^{152} + 87y^{151} + \cdots + 2765433856y + 66064384$
c_8	$y^{152} + 3y^{151} + \cdots + 3614155020y + 48958009$
c_9	$y^{152} + 31y^{151} + \cdots + 104404411598711997y + 2202989316336169$
c_{12}	$y^{152} + 47y^{151} + \cdots + 710392624054179195y + 3965585756572609$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.878179 + 0.495642I$ $a = -0.564021 - 0.738126I$ $b = -0.752235 + 0.139735I$	$-0.7060 + 15.2759I$	0
$u = 0.878179 - 0.495642I$ $a = -0.564021 + 0.738126I$ $b = -0.752235 - 0.139735I$	$-0.7060 - 15.2759I$	0
$u = -0.886322 + 0.532057I$ $a = 0.420058 - 0.788913I$ $b = 0.644080 + 0.199211I$	$-3.72811 - 8.56360I$	0
$u = -0.886322 - 0.532057I$ $a = 0.420058 + 0.788913I$ $b = 0.644080 - 0.199211I$	$-3.72811 + 8.56360I$	0
$u = 0.116120 + 0.945775I$ $a = 0.457765 + 0.653681I$ $b = 0.169583 + 0.417592I$	$-2.65978 - 0.93404I$	0
$u = 0.116120 - 0.945775I$ $a = 0.457765 - 0.653681I$ $b = 0.169583 - 0.417592I$	$-2.65978 + 0.93404I$	0
$u = 0.407000 + 1.005930I$ $a = -0.437541 + 0.247181I$ $b = 0.810914 + 0.503999I$	$-1.70138 - 1.08051I$	0
$u = 0.407000 - 1.005930I$ $a = -0.437541 - 0.247181I$ $b = 0.810914 - 0.503999I$	$-1.70138 + 1.08051I$	0
$u = -0.742540 + 0.507978I$ $a = -0.884196 + 0.627862I$ $b = -0.601044 - 0.139088I$	$2.69781 - 8.89406I$	0
$u = -0.742540 - 0.507978I$ $a = -0.884196 - 0.627862I$ $b = -0.601044 + 0.139088I$	$2.69781 + 8.89406I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.833938 + 0.729054I$ $a = 0.193277 - 0.443729I$ $b = -0.445113 - 0.516791I$	$-1.33475 - 9.55748I$	0
$u = 0.833938 - 0.729054I$ $a = 0.193277 + 0.443729I$ $b = -0.445113 + 0.516791I$	$-1.33475 + 9.55748I$	0
$u = 0.788215 + 0.402245I$ $a = -0.397730 - 0.625511I$ $b = -0.252690 - 0.409109I$	$-3.76675 + 2.08728I$	0
$u = 0.788215 - 0.402245I$ $a = -0.397730 + 0.625511I$ $b = -0.252690 + 0.409109I$	$-3.76675 - 2.08728I$	0
$u = -0.430313 + 1.040840I$ $a = 0.505748 + 0.188593I$ $b = 0.216466 - 0.014818I$	$-2.69394 - 0.61392I$	0
$u = -0.430313 - 1.040840I$ $a = 0.505748 - 0.188593I$ $b = 0.216466 + 0.014818I$	$-2.69394 + 0.61392I$	0
$u = -0.718800 + 0.496615I$ $a = 0.239945 + 0.250970I$ $b = -0.306341 + 0.691719I$	$2.65155 + 4.05569I$	0
$u = -0.718800 - 0.496615I$ $a = 0.239945 - 0.250970I$ $b = -0.306341 - 0.691719I$	$2.65155 - 4.05569I$	0
$u = 0.765332 + 0.836222I$ $a = -0.496086 + 0.021099I$ $b = -0.410884 - 0.209396I$	$-3.70871 + 3.30219I$	0
$u = 0.765332 - 0.836222I$ $a = -0.496086 - 0.021099I$ $b = -0.410884 + 0.209396I$	$-3.70871 - 3.30219I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.866630+0.737689I$ $a=-0.257202-0.440095I$ $b=\ \ 0.595072-0.290409I$	$-4.23349+2.67967I$	0
$u=-0.866630-0.737689I$ $a=-0.257202+0.440095I$ $b=\ \ 0.595072+0.290409I$	$-4.23349-2.67967I$	0
$u=-0.798518+0.321414I$ $a=-0.403875+0.708676I$ $b=-0.678022-0.341985I$	$3.00753-0.46886I$	0
$u=-0.798518-0.321414I$ $a=-0.403875-0.708676I$ $b=-0.678022+0.341985I$	$3.00753+0.46886I$	0
$u=\ \ 0.010639+1.150670I$ $a=-0.122608-0.168471I$ $b=\ \ 0.389426+1.074840I$	$-1.53894-1.47676I$	0
$u=\ \ 0.010639-1.150670I$ $a=-0.122608+0.168471I$ $b=\ \ 0.389426-1.074840I$	$-1.53894+1.47676I$	0
$u=-0.670173+0.936099I$ $a=\ \ 0.182741+0.438576I$ $b=-0.168191+0.197395I$	$1.30622-4.56377I$	0
$u=-0.670173-0.936099I$ $a=\ \ 0.182741-0.438576I$ $b=-0.168191-0.197395I$	$1.30622+4.56377I$	0
$u=\ \ 0.885952+0.738183I$ $a=-0.031977-0.485715I$ $b=-0.452412+0.243336I$	$4.23346+3.17237I$	0
$u=\ \ 0.885952-0.738183I$ $a=-0.031977+0.485715I$ $b=-0.452412-0.243336I$	$4.23346-3.17237I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.632233 + 0.513263I$ $a = -0.939088 - 0.272049I$ $b = -0.621434 - 0.417344I$	$-4.29681 + 2.42359I$	0
$u = 0.632233 - 0.513263I$ $a = -0.939088 + 0.272049I$ $b = -0.621434 + 0.417344I$	$-4.29681 - 2.42359I$	0
$u = -0.205898 + 1.186000I$ $a = -0.582756 + 0.982859I$ $b = 0.447247 + 0.094284I$	$-1.65459 + 3.47179I$	0
$u = -0.205898 - 1.186000I$ $a = -0.582756 - 0.982859I$ $b = 0.447247 - 0.094284I$	$-1.65459 - 3.47179I$	0
$u = -1.139650 + 0.433163I$ $a = 0.116838 - 0.194203I$ $b = 0.262431 - 0.162027I$	$0.03737 - 5.44081I$	0
$u = -1.139650 - 0.433163I$ $a = 0.116838 + 0.194203I$ $b = 0.262431 + 0.162027I$	$0.03737 + 5.44081I$	0
$u = 0.410672 + 0.652255I$ $a = -0.293315 - 0.129450I$ $b = -0.508365 + 0.769709I$	$4.54413 + 3.63997I$	0
$u = 0.410672 - 0.652255I$ $a = -0.293315 + 0.129450I$ $b = -0.508365 - 0.769709I$	$4.54413 - 3.63997I$	0
$u = 0.652917 + 0.400077I$ $a = 0.875931 + 0.919214I$ $b = 0.587310 - 0.280434I$	$-0.37881 + 4.59426I$	0
$u = 0.652917 - 0.400077I$ $a = 0.875931 - 0.919214I$ $b = 0.587310 + 0.280434I$	$-0.37881 - 4.59426I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.129057 + 0.740489I$ $a = -0.559667 + 0.791209I$ $b = 1.23420 - 0.86120I$	$-3.38245 - 1.15411I$	0
$u = 0.129057 - 0.740489I$ $a = -0.559667 - 0.791209I$ $b = 1.23420 + 0.86120I$	$-3.38245 + 1.15411I$	0
$u = 0.154921 + 1.244210I$ $a = 1.49381 + 0.02502I$ $b = -1.42953 - 0.41635I$	$-3.34546 + 5.16441I$	0
$u = 0.154921 - 1.244210I$ $a = 1.49381 - 0.02502I$ $b = -1.42953 + 0.41635I$	$-3.34546 - 5.16441I$	0
$u = 0.731029 + 0.077477I$ $a = -0.292731 - 0.205590I$ $b = 0.480046 + 0.669669I$	$0.06364 - 2.09801I$	0
$u = 0.731029 - 0.077477I$ $a = -0.292731 + 0.205590I$ $b = 0.480046 - 0.669669I$	$0.06364 + 2.09801I$	0
$u = -0.698365 + 0.208979I$ $a = -0.248960 - 1.215250I$ $b = -0.079980 - 0.434451I$	$-1.64281 + 2.39766I$	0
$u = -0.698365 - 0.208979I$ $a = -0.248960 + 1.215250I$ $b = -0.079980 + 0.434451I$	$-1.64281 - 2.39766I$	0
$u = 0.070858 + 1.275140I$ $a = 2.26182 + 0.52413I$ $b = -3.71114 - 0.78285I$	$-1.83616 + 7.02854I$	0
$u = 0.070858 - 1.275140I$ $a = 2.26182 - 0.52413I$ $b = -3.71114 + 0.78285I$	$-1.83616 - 7.02854I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.410942 + 0.550754I$ $a = 0.774903 - 1.136430I$ $b = 0.112360 - 0.223213I$	$4.73178 - 0.42762I$	0
$u = 0.410942 - 0.550754I$ $a = 0.774903 + 1.136430I$ $b = 0.112360 + 0.223213I$	$4.73178 + 0.42762I$	0
$u = -0.115670 + 1.319870I$ $a = -1.36451 + 0.88061I$ $b = 2.23719 - 0.43979I$	$-4.80210 - 4.79919I$	0
$u = -0.115670 - 1.319870I$ $a = -1.36451 - 0.88061I$ $b = 2.23719 + 0.43979I$	$-4.80210 + 4.79919I$	0
$u = 0.208472 + 1.310300I$ $a = 0.89939 + 1.17267I$ $b = -1.58138 - 1.27280I$	$-6.08306 + 0.50528I$	0
$u = 0.208472 - 1.310300I$ $a = 0.89939 - 1.17267I$ $b = -1.58138 + 1.27280I$	$-6.08306 - 0.50528I$	0
$u = -0.508578 + 0.431740I$ $a = 1.248810 + 0.056768I$ $b = 1.009340 - 0.226090I$	$-2.52055 - 5.73891I$	0
$u = -0.508578 - 0.431740I$ $a = 1.248810 - 0.056768I$ $b = 1.009340 + 0.226090I$	$-2.52055 + 5.73891I$	0
$u = -0.133462 + 1.331980I$ $a = -2.90036 - 0.13099I$ $b = 3.26439 + 0.50437I$	$-2.23942 - 8.63079I$	0
$u = -0.133462 - 1.331980I$ $a = -2.90036 + 0.13099I$ $b = 3.26439 - 0.50437I$	$-2.23942 + 8.63079I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.033696 + 1.350720I$ $a = 1.70640 - 0.85038I$ $b = -2.82792 + 1.64885I$	$-0.265313 - 0.091703I$	0
$u = 0.033696 - 1.350720I$ $a = 1.70640 + 0.85038I$ $b = -2.82792 - 1.64885I$	$-0.265313 + 0.091703I$	0
$u = 0.606994 + 0.220097I$ $a = 0.89141 + 1.16253I$ $b = 0.933696 - 0.308841I$	$-0.49470 + 3.84426I$	0
$u = 0.606994 - 0.220097I$ $a = 0.89141 - 1.16253I$ $b = 0.933696 + 0.308841I$	$-0.49470 - 3.84426I$	0
$u = 0.642477 + 0.029689I$ $a = 0.48324 - 2.08567I$ $b = 0.310626 + 0.240849I$	$1.51598 - 4.61783I$	$7.58913 + 6.56112I$
$u = 0.642477 - 0.029689I$ $a = 0.48324 + 2.08567I$ $b = 0.310626 - 0.240849I$	$1.51598 + 4.61783I$	$7.58913 - 6.56112I$
$u = -0.115573 + 1.361180I$ $a = -1.58752 + 0.07873I$ $b = 2.50751 + 0.05649I$	$-3.72991 - 2.68509I$	0
$u = -0.115573 - 1.361180I$ $a = -1.58752 - 0.07873I$ $b = 2.50751 - 0.05649I$	$-3.72991 + 2.68509I$	0
$u = 0.001948 + 1.367560I$ $a = -0.634661 - 1.006570I$ $b = 0.565920 + 0.136836I$	$-0.09493 - 3.07336I$	0
$u = 0.001948 - 1.367560I$ $a = -0.634661 + 1.006570I$ $b = 0.565920 - 0.136836I$	$-0.09493 + 3.07336I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.314984 + 0.538551I$ $a = 0.411245 + 0.685565I$ $b = -1.51127 - 0.96772I$	$-0.56290 + 7.37137I$	$-3.06670 - 12.47022I$
$u = 0.314984 - 0.538551I$ $a = 0.411245 - 0.685565I$ $b = -1.51127 + 0.96772I$	$-0.56290 - 7.37137I$	$-3.06670 + 12.47022I$
$u = -0.184310 + 1.363750I$ $a = -1.44372 + 0.49130I$ $b = 2.33228 - 1.00507I$	$-3.12222 - 3.03364I$	0
$u = -0.184310 - 1.363750I$ $a = -1.44372 - 0.49130I$ $b = 2.33228 + 1.00507I$	$-3.12222 + 3.03364I$	0
$u = 0.037332 + 1.388960I$ $a = -0.202938 - 0.969776I$ $b = 0.46607 + 2.80907I$	$-0.46634 + 1.58117I$	0
$u = 0.037332 - 1.388960I$ $a = -0.202938 + 0.969776I$ $b = 0.46607 - 2.80907I$	$-0.46634 - 1.58117I$	0
$u = -0.538277 + 0.262771I$ $a = -0.50775 + 1.86121I$ $b = -0.204069 - 0.084432I$	$1.97803 - 0.38146I$	$5.59987 + 4.41528I$
$u = -0.538277 - 0.262771I$ $a = -0.50775 - 1.86121I$ $b = -0.204069 + 0.084432I$	$1.97803 + 0.38146I$	$5.59987 - 4.41528I$
$u = 0.060103 + 1.402450I$ $a = -2.24427 + 0.88372I$ $b = 2.67619 - 1.09906I$	$-1.05714 + 4.17647I$	0
$u = 0.060103 - 1.402450I$ $a = -2.24427 - 0.88372I$ $b = 2.67619 + 1.09906I$	$-1.05714 - 4.17647I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.424518+0.417116I$ $a=-0.126083+0.185627I$ $b=-0.994890+0.501376I$	$1.37417-2.63932I$	$1.62166+6.27105I$
$u=-0.424518-0.417116I$ $a=-0.126083-0.185627I$ $b=-0.994890-0.501376I$	$1.37417+2.63932I$	$1.62166-6.27105I$
$u=0.230894+1.392570I$ $a=2.28908+0.15368I$ $b=-3.24032+0.31085I$	$-5.66371+6.89455I$	0
$u=0.230894-1.392570I$ $a=2.28908-0.15368I$ $b=-3.24032-0.31085I$	$-5.66371-6.89455I$	0
$u=0.02625+1.41853I$ $a=1.66091+1.08394I$ $b=-2.30521-0.97878I$	$-6.80026-0.18763I$	0
$u=0.02625-1.41853I$ $a=1.66091-1.08394I$ $b=-2.30521+0.97878I$	$-6.80026+0.18763I$	0
$u=0.08600+1.41972I$ $a=0.283142+0.341148I$ $b=-0.38647-1.70858I$	$-6.76026+4.33959I$	0
$u=0.08600-1.41972I$ $a=0.283142-0.341148I$ $b=-0.38647+1.70858I$	$-6.76026-4.33959I$	0
$u=-0.14412+1.42704I$ $a=-1.50627+0.96619I$ $b=2.16922-0.64576I$	$-4.51801-4.72556I$	0
$u=-0.14412-1.42704I$ $a=-1.50627-0.96619I$ $b=2.16922+0.64576I$	$-4.51801+4.72556I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.11819+1.43236I$ $a=-0.445663+0.854091I$ $b=\ \ 0.91778-2.49354I$	$-4.84175-9.29715I$	0
$u=-0.11819-1.43236I$ $a=-0.445663-0.854091I$ $b=\ \ 0.91778+2.49354I$	$-4.84175+9.29715I$	0
$u=-0.552765+0.014313I$ $a=-0.551912+0.994139I$ $b=-1.33289-0.60978I$	$1.92935-6.33185I$	$7.17773+7.64906I$
$u=-0.552765-0.014313I$ $a=-0.551912-0.994139I$ $b=-1.33289+0.60978I$	$1.92935+6.33185I$	$7.17773-7.64906I$
$u=-0.02545+1.44803I$ $a=-0.857855-0.915020I$ $b=\ \ 1.379970+0.195468I$	$-7.80468+0.57106I$	0
$u=-0.02545-1.44803I$ $a=-0.857855+0.915020I$ $b=\ \ 1.379970-0.195468I$	$-7.80468-0.57106I$	0
$u=\ \ 0.265503+0.474764I$ $a=\ \ 0.044541+0.548942I$ $b=\ \ 0.493979+0.594564I$	$-1.19022-1.06033I$	$-1.73863+1.28370I$
$u=\ \ 0.265503-0.474764I$ $a=\ \ 0.044541-0.548942I$ $b=\ \ 0.493979-0.594564I$	$-1.19022+1.06033I$	$-1.73863-1.28370I$
$u=\ \ 0.08657+1.45661I$ $a=\ \ 1.79739-0.84767I$ $b=-2.52447+0.59620I$	$-7.94583+5.57874I$	0
$u=\ \ 0.08657-1.45661I$ $a=\ \ 1.79739+0.84767I$ $b=-2.52447-0.59620I$	$-7.94583-5.57874I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.28382+1.43940I$ $a=-1.78343+0.10037I$ $b=\ \ 2.50470+0.23320I$	$-2.63550-4.32707I$	0
$u=-0.28382-1.43940I$ $a=-1.78343-0.10037I$ $b=\ \ 2.50470-0.23320I$	$-2.63550+4.32707I$	0
$u=-0.32556+1.43576I$ $a=\ \ 0.786718-0.659743I$ $b=-1.61784+0.97399I$	$-6.90278-1.49526I$	0
$u=-0.32556-1.43576I$ $a=\ \ 0.786718+0.659743I$ $b=-1.61784-0.97399I$	$-6.90278+1.49526I$	0
$u=-0.19290+1.46908I$ $a=\ \ 1.95452-0.08392I$ $b=-3.03246-0.75220I$	$-8.68740-8.37475I$	0
$u=-0.19290-1.46908I$ $a=\ \ 1.95452+0.08392I$ $b=-3.03246+0.75220I$	$-8.68740+8.37475I$	0
$u=-0.492386+0.154953I$ $a=-1.074880+0.699992I$ $b=-0.280796-0.145558I$	$1.040050-0.549467I$	$7.43364+2.00474I$
$u=-0.492386-0.154953I$ $a=-1.074880-0.699992I$ $b=-0.280796+0.145558I$	$1.040050+0.549467I$	$7.43364-2.00474I$
$u=\ \ 0.23108+1.48576I$ $a=\ \ 1.88952-0.11064I$ $b=-2.90807+0.43693I$	$-6.55064+7.81946I$	0
$u=\ \ 0.23108-1.48576I$ $a=\ \ 1.88952+0.11064I$ $b=-2.90807-0.43693I$	$-6.55064-7.81946I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.22737 + 1.49355I$ $a = -1.69122 - 0.29947I$ $b = 3.00950 - 0.23740I$	$-10.78190 + 5.59014I$	0
$u = 0.22737 - 1.49355I$ $a = -1.69122 + 0.29947I$ $b = 3.00950 + 0.23740I$	$-10.78190 - 5.59014I$	0
$u = 0.12929 + 1.51346I$ $a = -1.47261 - 1.46945I$ $b = 1.90290 + 1.11091I$	$-7.32672 + 9.14085I$	0
$u = 0.12929 - 1.51346I$ $a = -1.47261 + 1.46945I$ $b = 1.90290 - 1.11091I$	$-7.32672 - 9.14085I$	0
$u = -0.26396 + 1.52000I$ $a = -1.78890 - 0.10389I$ $b = 2.87925 + 0.58891I$	$-3.90420 - 12.58760I$	0
$u = -0.26396 - 1.52000I$ $a = -1.78890 + 0.10389I$ $b = 2.87925 - 0.58891I$	$-3.90420 + 12.58760I$	0
$u = 0.30619 + 1.51476I$ $a = -1.104380 - 0.300115I$ $b = 2.02876 + 0.09939I$	$-10.02160 + 6.17791I$	0
$u = 0.30619 - 1.51476I$ $a = -1.104380 + 0.300115I$ $b = 2.02876 - 0.09939I$	$-10.02160 - 6.17791I$	0
$u = -0.11442 + 1.55249I$ $a = 1.63445 + 0.36014I$ $b = -2.66201 - 0.79590I$	$-10.77330 - 2.23854I$	0
$u = -0.11442 - 1.55249I$ $a = 1.63445 - 0.36014I$ $b = -2.66201 + 0.79590I$	$-10.77330 + 2.23854I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.31801 + 1.53267I$ $a = -1.80409 - 0.05058I$ $b = 2.84291 - 0.42225I$	$-7.2738 + 19.6356I$	0
$u = 0.31801 - 1.53267I$ $a = -1.80409 + 0.05058I$ $b = 2.84291 + 0.42225I$	$-7.2738 - 19.6356I$	0
$u = -0.340179 + 0.267909I$ $a = 0.92686 + 4.13715I$ $b = 0.350396 - 0.479965I$	$0.73173 - 7.59496I$	$6.6801 + 14.7598I$
$u = -0.340179 - 0.267909I$ $a = 0.92686 - 4.13715I$ $b = 0.350396 + 0.479965I$	$0.73173 + 7.59496I$	$6.6801 - 14.7598I$
$u = -0.31033 + 1.54831I$ $a = 1.74043 - 0.02740I$ $b = -2.71337 - 0.30230I$	$-10.4891 - 12.9239I$	0
$u = -0.31033 - 1.54831I$ $a = 1.74043 + 0.02740I$ $b = -2.71337 + 0.30230I$	$-10.4891 + 12.9239I$	0
$u = 0.18932 + 1.57314I$ $a = -1.47951 + 0.14267I$ $b = 2.55432 - 0.66789I$	$-11.56050 + 6.53889I$	0
$u = 0.18932 - 1.57314I$ $a = -1.47951 - 0.14267I$ $b = 2.55432 + 0.66789I$	$-11.56050 - 6.53889I$	0
$u = 0.43712 + 1.52509I$ $a = 0.431883 + 0.353741I$ $b = -0.880671 - 0.091812I$	$-4.61601 + 2.57585I$	0
$u = 0.43712 - 1.52509I$ $a = 0.431883 - 0.353741I$ $b = -0.880671 + 0.091812I$	$-4.61601 - 2.57585I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.218003 + 0.343210I$ $a = 1.79163 + 1.71915I$ $b = 0.294126 - 1.004280I$	$-2.02235 + 4.35269I$	$-5.29583 - 7.76813I$
$u = 0.218003 - 0.343210I$ $a = 1.79163 - 1.71915I$ $b = 0.294126 + 1.004280I$	$-2.02235 - 4.35269I$	$-5.29583 + 7.76813I$
$u = 0.25378 + 1.57679I$ $a = -1.64001 + 0.07609I$ $b = 2.32855 - 0.32581I$	$-3.33192 + 7.07748I$	0
$u = 0.25378 - 1.57679I$ $a = -1.64001 - 0.07609I$ $b = 2.32855 + 0.32581I$	$-3.33192 - 7.07748I$	0
$u = -0.36055 + 1.55612I$ $a = 0.926293 - 0.076577I$ $b = -1.56139 - 0.28853I$	$-6.53626 - 10.66010I$	0
$u = -0.36055 - 1.55612I$ $a = 0.926293 + 0.076577I$ $b = -1.56139 + 0.28853I$	$-6.53626 + 10.66010I$	0
$u = 0.340672 + 0.177792I$ $a = -2.03903 + 2.59056I$ $b = -0.069538 - 0.656597I$	$-1.50489 + 2.93196I$	$2.99677 - 7.01707I$
$u = 0.340672 - 0.177792I$ $a = -2.03903 - 2.59056I$ $b = -0.069538 + 0.656597I$	$-1.50489 - 2.93196I$	$2.99677 + 7.01707I$
$u = -0.23493 + 1.61887I$ $a = -0.663396 + 0.127693I$ $b = 1.227330 + 0.158733I$	$-4.12564 - 0.03704I$	0
$u = -0.23493 - 1.61887I$ $a = -0.663396 - 0.127693I$ $b = 1.227330 - 0.158733I$	$-4.12564 + 0.03704I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.01307 + 1.63907I$ $a = 2.30072 - 0.44773I$ $b = -2.75483 + 0.37032I$	$-11.69300 - 0.79290I$	0
$u = 0.01307 - 1.63907I$ $a = 2.30072 + 0.44773I$ $b = -2.75483 - 0.37032I$	$-11.69300 + 0.79290I$	0
$u = -0.16494 + 1.63396I$ $a = 1.346350 - 0.410304I$ $b = -1.96191 + 0.28987I$	$-12.55620 - 1.07655I$	0
$u = -0.16494 - 1.63396I$ $a = 1.346350 + 0.410304I$ $b = -1.96191 - 0.28987I$	$-12.55620 + 1.07655I$	0
$u = 0.15328 + 1.64996I$ $a = -1.058120 - 0.378769I$ $b = 1.73895 + 0.34299I$	$-9.68133 - 5.83768I$	0
$u = 0.15328 - 1.64996I$ $a = -1.058120 + 0.378769I$ $b = 1.73895 - 0.34299I$	$-9.68133 + 5.83768I$	0
$u = 0.119912 + 0.155928I$ $a = -2.47635 + 1.11465I$ $b = -0.89605 + 1.13124I$	$4.12384 + 3.28383I$	$16.8921 + 6.2759I$
$u = 0.119912 - 0.155928I$ $a = -2.47635 - 1.11465I$ $b = -0.89605 - 1.13124I$	$4.12384 - 3.28383I$	$16.8921 - 6.2759I$
$u = 0.175566 + 0.025621I$ $a = 9.92478 + 2.46534I$ $b = 0.199847 - 0.442604I$	$4.18707 - 0.94466I$	$27.0614 + 1.9119I$
$u = 0.175566 - 0.025621I$ $a = 9.92478 - 2.46534I$ $b = 0.199847 + 0.442604I$	$4.18707 + 0.94466I$	$27.0614 - 1.9119I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.010212 + 0.164492I$		
$a = -4.26471 + 3.76365I$	$-2.25214 + 0.78070I$	$-2.04391 - 5.83531I$
$b = 0.090393 - 1.315380I$		
$u = 0.010212 - 0.164492I$		
$a = -4.26471 - 3.76365I$	$-2.25214 - 0.78070I$	$-2.04391 + 5.83531I$
$b = 0.090393 + 1.315380I$		

II. $I_2^u = \langle 2.31 \times 10^{13} u^{41} - 7.92 \times 10^{11} u^{40} + \cdots + 7.86 \times 10^{11} b - 1.06 \times 10^{12},\ -6.14 \times 10^{13} u^{41} - 6.38 \times 10^{13} u^{40} + \cdots + 3.93 \times 10^{12} a - 8.02 \times 10^{13},\ u^{42} + 23u^{40} + \cdots + 26u^2 + 1 \rangle$

(i) Arc colorings

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

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

$$a_1 = \begin{pmatrix} 15.6192u^{41} + 16.2455u^{40} + \cdots - 47.7102u + 20.4175 \\ -29.4427u^{41} + 1.00776u^{40} + \cdots - 19.6900u + 1.34573 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 10.9487u^{41} - 10.6897u^{40} + \cdots - 43.6395u + 2.82633 \\ -21.3908u^{41} + 45.2751u^{40} + \cdots - 15.0194u + 28.2809 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u \\ u \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 1.63053u^{41} + 0.627881u^{40} + \cdots + 129.162u + 11.4087 \\ 3.66978u^{41} + 13.5200u^{40} + \cdots - 5.27254u + 3.61399 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -10.3342u^{41} - 3.09895u^{40} + \cdots - 50.4279u + 43.4124 \\ 2.70720u^{41} - 16.2755u^{40} + \cdots + 11.2746u - 12.3321 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 7.06947u^{41} + 8.15144u^{40} + \cdots + 34.0855u - 0.616606 \\ -47.6337u^{41} + 4.81822u^{40} + \cdots - 22.5279u + 5.80141 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 7.49855u^{41} + 0.306910u^{40} + \cdots - 54.5927u + 13.2781 \\ -8.57309u^{41} + 39.9932u^{40} + \cdots - 6.94100u + 24.3927 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 28.0565u^{41} - 10.8251u^{40} + \cdots + 166.570u - 23.6621 \\ -43.2211u^{41} + 10.6470u^{40} + \cdots - 19.2851u + 10.3383 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= -\frac{384710007573457}{3928895726965}u^{41} + \frac{356383672834697}{3928895726965}u^{40} + \cdots - \frac{888254720949903}{3928895726965}u + \frac{259826274734503}{3928895726965}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{42} - 4u^{41} + \cdots - u + 1$
c_2	$u^{42} + 2u^{41} + \cdots - 2u + 1$
c_3	$u^{42} + 3u^{41} + \cdots + 14u^2 + 1$
c_4, c_5	$u^{42} + 23u^{40} + \cdots + 26u^2 + 1$
c_6	$u^{42} - 2u^{41} + \cdots + 2u + 1$
c_7	$u^{42} - 4u^{41} + \cdots - 2u + 1$
c_8	$u^{42} - u^{40} + \cdots - 69u + 7$
c_9	$u^{42} - 2u^{41} + \cdots - 2u + 1$
c_{10}	$u^{42} + 23u^{40} + \cdots + 26u^2 + 1$
c_{11}	$u^{42} + 4u^{41} + \cdots + 2u + 1$
c_{12}	$u^{42} + u^{40} + \cdots + 178u + 29$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{42} - 22y^{41} + \cdots + 3y + 1$
c_2, c_6	$y^{42} + 26y^{41} + \cdots + 38y + 1$
c_3	$y^{42} - 3y^{41} + \cdots + 28y + 1$
c_4, c_5, c_{10}	$y^{42} + 46y^{41} + \cdots + 52y + 1$
c_7, c_{11}	$y^{42} + 22y^{41} + \cdots + 40y + 1$
c_8	$y^{42} - 2y^{41} + \cdots - 1667y + 49$
c_9	$y^{42} - 10y^{41} + \cdots + 10y + 1$
c_{12}	$y^{42} + 2y^{41} + \cdots - 37136y + 841$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.935015+0.465202I$ $a=\ \ 0.115614+0.136661I$ $b=\ \ 0.320022-0.356603I$	$0.21293-5.19650I$	0
$u=-0.935015-0.465202I$ $a=\ \ 0.115614-0.136661I$ $b=\ \ 0.320022+0.356603I$	$0.21293+5.19650I$	0
$u=\ \ 0.771341+0.782004I$ $a=-0.026030+0.497950I$ $b=\ \ 0.349444-0.411143I$	$4.40215+2.91947I$	0
$u=\ \ 0.771341-0.782004I$ $a=-0.026030-0.497950I$ $b=\ \ 0.349444+0.411143I$	$4.40215-2.91947I$	0
$u=-0.108321+1.107080I$ $a=-0.090588+0.733855I$ $b=-0.328593+0.158640I$	$-3.15399+1.89664I$	0
$u=-0.108321-1.107080I$ $a=-0.090588-0.733855I$ $b=-0.328593-0.158640I$	$-3.15399-1.89664I$	0
$u=\ \ 0.592481+0.653798I$ $a=-0.902488+0.113630I$ $b=-0.482784-0.296539I$	$-3.66950+2.80930I$	$1.88360-2.35805I$
$u=\ \ 0.592481-0.653798I$ $a=-0.902488-0.113630I$ $b=-0.482784+0.296539I$	$-3.66950-2.80930I$	$1.88360+2.35805I$
$u=-0.349342+0.709873I$ $a=\ \ 0.692030+0.789837I$ $b=-0.854993+0.014237I$	$-2.66470+1.94037I$	$-2.85084-4.39177I$
$u=-0.349342-0.709873I$ $a=\ \ 0.692030-0.789837I$ $b=-0.854993-0.014237I$	$-2.66470-1.94037I$	$-2.85084+4.39177I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.115958+1.230030I$ $a=-1.113570+0.783199I$ $b=1.24627-1.59867I$	$-4.55864-3.39138I$	0
$u=-0.115958-1.230030I$ $a=-1.113570-0.783199I$ $b=1.24627+1.59867I$	$-4.55864+3.39138I$	0
$u=0.347078+0.660872I$ $a=0.319103+0.415281I$ $b=-0.817409-1.037710I$	$-2.66609+0.11927I$	$-3.66928-0.85360I$
$u=0.347078-0.660872I$ $a=0.319103-0.415281I$ $b=-0.817409+1.037710I$	$-2.66609-0.11927I$	$-3.66928+0.85360I$
$u=0.025342+1.283740I$ $a=0.82018+1.25199I$ $b=-0.720513-0.417969I$	$0.74966-2.90451I$	0
$u=0.025342-1.283740I$ $a=0.82018-1.25199I$ $b=-0.720513+0.417969I$	$0.74966+2.90451I$	0
$u=0.044937+1.298130I$ $a=2.40556+0.77309I$ $b=-3.15938-1.42777I$	$-2.75956+7.26572I$	0
$u=0.044937-1.298130I$ $a=2.40556-0.77309I$ $b=-3.15938+1.42777I$	$-2.75956-7.26572I$	0
$u=0.000361+1.321850I$ $a=0.795975-1.125190I$ $b=-1.20695+2.78665I$	$0.313348-0.976815I$	0
$u=0.000361-1.321850I$ $a=0.795975+1.125190I$ $b=-1.20695-2.78665I$	$0.313348+0.976815I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.387652 + 1.337110I$ $a = 0.340284 + 0.622325I$ $b = -0.928475 - 0.324657I$	$-4.31023 + 2.76338I$	0
$u = 0.387652 - 1.337110I$ $a = 0.340284 - 0.622325I$ $b = -0.928475 + 0.324657I$	$-4.31023 - 2.76338I$	0
$u = -0.210164 + 1.383040I$ $a = -2.35128 + 0.08957I$ $b = 3.36733 + 0.32066I$	$-5.44686 - 7.42912I$	0
$u = -0.210164 - 1.383040I$ $a = -2.35128 - 0.08957I$ $b = 3.36733 - 0.32066I$	$-5.44686 + 7.42912I$	0
$u = -0.572535 + 0.163270I$ $a = -0.92308 + 1.57770I$ $b = -0.823254 - 0.347001I$	$-0.47081 - 4.61351I$	$2.78514 + 10.91680I$
$u = -0.572535 - 0.163270I$ $a = -0.92308 - 1.57770I$ $b = -0.823254 + 0.347001I$	$-0.47081 + 4.61351I$	$2.78514 - 10.91680I$
$u = 0.20693 + 1.47466I$ $a = 2.00546 - 0.10822I$ $b = -2.59345 + 0.36187I$	$-2.60937 + 5.63813I$	0
$u = 0.20693 - 1.47466I$ $a = 2.00546 + 0.10822I$ $b = -2.59345 - 0.36187I$	$-2.60937 - 5.63813I$	0
$u = -0.15915 + 1.50804I$ $a = 1.010670 - 0.397754I$ $b = -1.39829 - 0.26811I$	$-6.75553 - 8.30096I$	0
$u = -0.15915 - 1.50804I$ $a = 1.010670 + 0.397754I$ $b = -1.39829 + 0.26811I$	$-6.75553 + 8.30096I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.21652 + 1.50524I$ $a = -1.66092 - 0.10940I$ $b = 2.94978 - 0.49926I$	$-10.49650 + 5.82710I$	0
$u = 0.21652 - 1.50524I$ $a = -1.66092 + 0.10940I$ $b = 2.94978 + 0.49926I$	$-10.49650 - 5.82710I$	0
$u = -0.33537 + 1.50022I$ $a = -0.573970 + 0.350488I$ $b = 1.185250 - 0.252318I$	$-3.84925 - 0.42432I$	0
$u = -0.33537 - 1.50022I$ $a = -0.573970 - 0.350488I$ $b = 1.185250 + 0.252318I$	$-3.84925 + 0.42432I$	0
$u = 0.180136 + 0.404802I$ $a = 0.378500 - 0.058856I$ $b = 0.844088 - 1.097650I$	$3.90096 + 3.42102I$	$-9.67445 - 9.04128I$
$u = 0.180136 - 0.404802I$ $a = 0.378500 + 0.058856I$ $b = 0.844088 + 1.097650I$	$3.90096 - 3.42102I$	$-9.67445 + 9.04128I$
$u = 0.033288 + 0.418528I$ $a = -2.27110 + 1.88742I$ $b = 1.142650 - 0.260930I$	$0.45843 - 6.85842I$	$2.68810 + 5.24695I$
$u = 0.033288 - 0.418528I$ $a = -2.27110 - 1.88742I$ $b = 1.142650 + 0.260930I$	$0.45843 + 6.85842I$	$2.68810 - 5.24695I$
$u = -0.01678 + 1.65584I$ $a = -2.19647 - 0.32527I$ $b = 2.64227 + 0.24069I$	$-11.59210 + 0.83440I$	0
$u = -0.01678 - 1.65584I$ $a = -2.19647 + 0.32527I$ $b = 2.64227 - 0.24069I$	$-11.59210 - 0.83440I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.003438+0.292839I$		
$a=-1.77389-5.30385I$	$3.97276+0.97275I$	$-10.60321-7.45587I$
$b=\ \ 0.266969-0.128098I$		
$u=-0.003438-0.292839I$		
$a=-1.77389+5.30385I$	$3.97276-0.97275I$	$-10.60321+7.45587I$
$b=\ \ 0.266969+0.128098I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{42}-4u^{41}+\cdots-u+1)(u^{152}-11u^{151}+\cdots+18140u+5351)$
c_2	$(u^{42}+2u^{41}+\cdots-2u+1)(u^{152}-u^{151}+\cdots+4353u+1651)$
c_3	$(u^{42}+3u^{41}+\cdots+14u^2+1)(u^{152}-2u^{151}+\cdots+87u+7)$
c_4, c_5	$(u^{42}+23u^{40}+\cdots+26u^2+1)(u^{152}+u^{151}+\cdots+61u+3)$
c_6	$(u^{42}-2u^{41}+\cdots+2u+1)(u^{152}-u^{151}+\cdots+4353u+1651)$
c_7	$(u^{42}-4u^{41}+\cdots-2u+1)(u^{152}+3u^{151}+\cdots+61152u+8128)$
c_8	$(u^{42}-u^{40}+\cdots-69u+7)(u^{152}-u^{151}+\cdots+57030u+6997)$
c_9	$(u^{42}-2u^{41}+\cdots-2u+1)$ $\cdot(u^{152}-5u^{151}+\cdots+176391091u+46936013)$
c_{10}	$(u^{42}+23u^{40}+\cdots+26u^2+1)(u^{152}+u^{151}+\cdots+61u+3)$
c_{11}	$(u^{42}+4u^{41}+\cdots+2u+1)(u^{152}+3u^{151}+\cdots+61152u+8128)$
c_{12}	$(u^{42}+u^{40}+\cdots+178u+29)$ $\cdot(u^{152}+u^{151}+\cdots-347000939u+62972897)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{42} - 22y^{41} + \cdots + 3y + 1)$ $\cdot (y^{152} - 33y^{151} + \cdots - 1604598874y + 28633201)$
c_2, c_6	$(y^{42} + 26y^{41} + \cdots + 38y + 1)$ $\cdot (y^{152} + 83y^{151} + \cdots + 110545925y + 2725801)$
c_3	$(y^{42} - 3y^{41} + \cdots + 28y + 1)(y^{152} - 10y^{151} + \cdots + 3323y + 49)$
c_4, c_5, c_{10}	$(y^{42} + 46y^{41} + \cdots + 52y + 1)(y^{152} + 155y^{151} + \cdots + 275y + 9)$
c_7, c_{11}	$(y^{42} + 22y^{41} + \cdots + 40y + 1)$ $\cdot (y^{152} + 87y^{151} + \cdots + 2765433856y + 66064384)$
c_8	$(y^{42} - 2y^{41} + \cdots - 1667y + 49)$ $\cdot (y^{152} + 3y^{151} + \cdots + 3614155020y + 48958009)$
c_9	$(y^{42} - 10y^{41} + \cdots + 10y + 1)$ $\cdot (y^{152} + 31y^{151} + \cdots + 104404411598711997y + 2202989316336169)$
c_{12}	$(y^{42} + 2y^{41} + \cdots - 37136y + 841)$ $\cdot (y^{152} + 47y^{151} + \cdots + 710392624054179195y + 3965585756572609)$