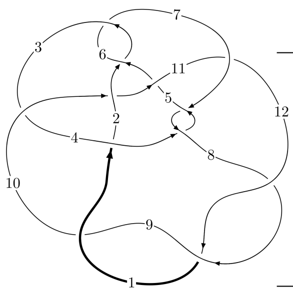
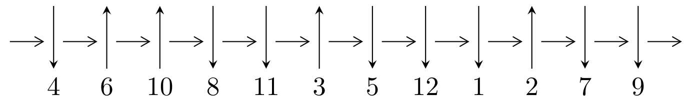
$12a_{0949}$ $(K12a_{0949})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$
\begin{aligned}
I_1^u = \langle & -2.31639 \times 10^{422} u^{132} + 1.53310 \times 10^{423} u^{131} + \cdots + 1.77653 \times 10^{424} b + 1.30059 \times 10^{424}, \\
& - 3.70487 \times 10^{424} u^{132} + 1.90525 \times 10^{425} u^{131} + \cdots + 2.13183 \times 10^{424} a + 4.70733 \times 10^{425}, \\
& u^{133} - 5u^{132} + \cdots - 56u - 3 \rangle \\
I_2^u = \langle & 6761534 u^{24} + 25064228 u^{23} + \cdots + 32603 b - 5175546, \\
& - 3451225 u^{24} - 12321594 u^{23} + \cdots + 32603 a + 2498173,\ u^{25} + 5u^{24} + \cdots - 7u - 1 \rangle \\
I_3^u = \langle & -6a^3 + 2a^2 + b - 27a - 9,\ 2a^4 + 9a^2 + 6a + 1,\ u - 1 \rangle \\
I_4^u = \langle & b,\ a - 1,\ u - 1 \rangle
\end{aligned}
$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 163 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. $\boldsymbol{I_1^u = \langle -2.32 \times 10^{422}u^{132} + 1.53 \times 10^{423}u^{131} + \cdots + 1.78 \times 10^{424}b + 1.30 \times 10^{424},\ -3.70 \times 10^{424}u^{132} + 1.91 \times 10^{425}u^{131} + \cdots + 2.13 \times 10^{424}a + 4.71 \times 10^{425},\ u^{133} - 5u^{132} + \cdots - 56u - 3\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

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

$$a_5 = \begin{pmatrix} 1.73788u^{132} - 8.93715u^{131} + \cdots - 298.967u - 22.0812 \\ 0.0130389u^{132} - 0.0862979u^{131} + \cdots - 11.5157u - 0.732099 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.75092u^{132} - 9.02344u^{131} + \cdots - 310.482u - 22.8133 \\ 0.0130389u^{132} - 0.0862979u^{131} + \cdots - 11.5157u - 0.732099 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.63049u^{132} + 8.15688u^{131} + \cdots + 595.484u + 44.4192 \\ 0.356925u^{132} - 1.97497u^{131} + \cdots - 21.3742u - 0.805447 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.81952u^{132} - 9.36921u^{131} + \cdots - 327.425u - 24.1733 \\ 0.000295256u^{132} - 0.0526861u^{131} + \cdots - 14.0734u - 0.887146 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.0524645u^{132} - 0.199611u^{131} + \cdots - 69.0014u - 6.56518 \\ -0.0372953u^{132} + 0.479760u^{131} + \cdots + 8.11647u + 0.646970 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.956137u^{132} - 4.71492u^{131} + \cdots - 444.889u - 30.0851 \\ -0.322208u^{132} + 1.81509u^{131} + \cdots + 5.03229u - 0.932874 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -3.25930u^{132} + 16.4774u^{131} + \cdots + 738.406u + 42.2610 \\ -0.130790u^{132} + 0.834469u^{131} + \cdots + 87.2420u + 6.33965 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.17653u^{132} - 5.26495u^{131} + \cdots - 634.853u - 55.6689$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{133} - 15u^{132} + \cdots + 11068u - 1172$
c_2, c_6	$u^{133} - 3u^{132} + \cdots - 17081u + 1539$
c_3	$2(2u^{133} + 2u^{132} + \cdots + 11264u + 2048)$
c_4, c_7	$u^{133} - 9u^{132} + \cdots - 24896u + 1952$
c_5	$2(2u^{133} + 2u^{132} + \cdots + 7848686u + 3253981)$
c_8, c_9, c_{12}	$u^{133} + 5u^{132} + \cdots - 56u + 3$
c_{10}	$u^{133} + 7u^{132} + \cdots + 62070u + 9146$
c_{11}	$u^{133} + 7u^{130} + \cdots + 14366u + 3254$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{133} - 7y^{132} + \cdots - 104928320y - 1373584$
c_2, c_6	$y^{133} - 77y^{132} + \cdots + 162555355y - 2368521$
c_3	$4(4y^{133} + 192y^{132} + \cdots - 1.10100 \times 10^{8}y - 4194304)$
c_4, c_7	$y^{133} + 93y^{132} + \cdots - 337168896y - 3810304$
c_5	$4(4y^{133} + 240y^{132} + \cdots - 5.32285 \times 10^{14}y - 1.05884 \times 10^{13})$
c_8, c_9, c_{12}	$y^{133} - 137y^{132} + \cdots - 56y - 9$
c_{10}	$y^{133} - 51y^{132} + \cdots + 15173548824y - 83649316$
c_{11}	$y^{133} + 108y^{131} + \cdots - 2741332040y - 10588516$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.574211 + 0.806522I$ $a = -0.47135 - 1.68203I$ $b = -0.458336 + 1.314170I$	$2.92527 + 8.52139I$	0
$u = -0.574211 - 0.806522I$ $a = -0.47135 + 1.68203I$ $b = -0.458336 - 1.314170I$	$2.92527 - 8.52139I$	0
$u = 0.378103 + 0.906879I$ $a = 0.33971 - 2.11105I$ $b = 0.293973 + 1.167940I$	$2.16623 - 4.99446I$	0
$u = 0.378103 - 0.906879I$ $a = 0.33971 + 2.11105I$ $b = 0.293973 - 1.167940I$	$2.16623 + 4.99446I$	0
$u = 0.329684 + 0.964221I$ $a = 0.01448 + 1.45443I$ $b = -0.445410 - 0.888166I$	$1.46652 - 5.73875I$	0
$u = 0.329684 - 0.964221I$ $a = 0.01448 - 1.45443I$ $b = -0.445410 + 0.888166I$	$1.46652 + 5.73875I$	0
$u = -0.494919 + 0.893036I$ $a = 0.71500 + 1.26830I$ $b = -0.238880 - 1.154660I$	$3.16581 - 3.01226I$	0
$u = -0.494919 - 0.893036I$ $a = 0.71500 - 1.26830I$ $b = -0.238880 + 1.154660I$	$3.16581 + 3.01226I$	0
$u = 0.924375 + 0.465795I$ $a = 0.341741 - 0.191628I$ $b = -0.437473 + 0.302466I$	$-0.783926 + 0.529519I$	0
$u = 0.924375 - 0.465795I$ $a = 0.341741 + 0.191628I$ $b = -0.437473 - 0.302466I$	$-0.783926 - 0.529519I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.014880 + 0.249045I$ $a = 0.26982 - 2.02091I$ $b = 0.025828 + 1.409670I$	$4.71692 + 1.38176I$	0
$u = 1.014880 - 0.249045I$ $a = 0.26982 + 2.02091I$ $b = 0.025828 - 1.409670I$	$4.71692 - 1.38176I$	0
$u = 0.373883 + 0.866496I$ $a = -0.02527 + 1.93367I$ $b = -0.332906 - 1.081600I$	$1.43426 - 2.64312I$	0
$u = 0.373883 - 0.866496I$ $a = -0.02527 - 1.93367I$ $b = -0.332906 + 1.081600I$	$1.43426 + 2.64312I$	0
$u = -0.532921 + 0.915024I$ $a = 0.33759 + 1.80539I$ $b = 0.482952 - 1.319860I$	$6.2072 + 14.4323I$	0
$u = -0.532921 - 0.915024I$ $a = 0.33759 - 1.80539I$ $b = 0.482952 + 1.319860I$	$6.2072 - 14.4323I$	0
$u = 0.989465 + 0.379484I$ $a = -0.80123 + 1.55516I$ $b = 0.091704 - 0.713483I$	$0.263606 - 0.184369I$	0
$u = 0.989465 - 0.379484I$ $a = -0.80123 - 1.55516I$ $b = 0.091704 + 0.713483I$	$0.263606 + 0.184369I$	0
$u = 0.415346 + 0.990925I$ $a = 0.386696 - 1.313430I$ $b = 0.157988 + 0.867765I$	$0.46372 - 2.33810I$	0
$u = 0.415346 - 0.990925I$ $a = 0.386696 + 1.313430I$ $b = 0.157988 - 0.867765I$	$0.46372 + 2.33810I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.704660+0.550275I$ $a = 1.200850-0.552040I$ $b = -0.097070+1.128250I$	$2.06026-1.40425I$	0
$u = 0.704660-0.550275I$ $a = 1.200850+0.552040I$ $b = -0.097070-1.128250I$	$2.06026+1.40425I$	0
$u = -0.696078+0.514809I$ $a = -0.723227-0.979580I$ $b = 0.215798+1.326840I$	$7.58706+0.38056I$	0
$u = -0.696078-0.514809I$ $a = -0.723227+0.979580I$ $b = 0.215798-1.326840I$	$7.58706-0.38056I$	0
$u = 0.566105+0.614307I$ $a = -0.0235346-0.0690271I$ $b = 0.441384-0.059551I$	$-1.03448-2.04846I$	0
$u = 0.566105-0.614307I$ $a = -0.0235346+0.0690271I$ $b = 0.441384+0.059551I$	$-1.03448+2.04846I$	0
$u = 0.794351+0.230141I$ $a = -0.43059+1.98792I$ $b = 0.204220-0.503604I$	$0.237202-0.167348I$	0
$u = 0.794351-0.230141I$ $a = -0.43059-1.98792I$ $b = 0.204220+0.503604I$	$0.237202+0.167348I$	0
$u = 1.109050+0.393892I$ $a = -0.521767+0.393448I$ $b = 0.343256-1.259130I$	$4.40836+2.54732I$	0
$u = 1.109050-0.393892I$ $a = -0.521767-0.393448I$ $b = 0.343256+1.259130I$	$4.40836-2.54732I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.403984 + 0.683130I$ $a = 0.84329 + 1.84290I$ $b = 0.417585 - 1.322650I$	$8.44013 + 3.83414I$	0
$u = -0.403984 - 0.683130I$ $a = 0.84329 - 1.84290I$ $b = 0.417585 + 1.322650I$	$8.44013 - 3.83414I$	0
$u = -0.537463 + 0.563850I$ $a = -0.450237 + 0.016524I$ $b = 0.964956 - 0.103893I$	$1.89345 + 9.32259I$	0
$u = -0.537463 - 0.563850I$ $a = -0.450237 - 0.016524I$ $b = 0.964956 + 0.103893I$	$1.89345 - 9.32259I$	0
$u = -0.727912 + 0.988878I$ $a = -0.651866 - 1.171610I$ $b = 0.320963 + 1.149250I$	$5.78280 - 8.24577I$	0
$u = -0.727912 - 0.988878I$ $a = -0.651866 + 1.171610I$ $b = 0.320963 - 1.149250I$	$5.78280 + 8.24577I$	0
$u = -0.224218 + 0.729839I$ $a = -0.653937 + 1.176690I$ $b = 0.355795 - 0.141174I$	$2.87171 - 5.33242I$	0
$u = -0.224218 - 0.729839I$ $a = -0.653937 - 1.176690I$ $b = 0.355795 + 0.141174I$	$2.87171 + 5.33242I$	0
$u = 0.497368 + 0.554874I$ $a = 0.613055 - 1.117160I$ $b = -0.633997 + 0.494336I$	$0.34427 - 1.51811I$	0
$u = 0.497368 - 0.554874I$ $a = 0.613055 + 1.117160I$ $b = -0.633997 - 0.494336I$	$0.34427 + 1.51811I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.114871 + 0.720135I$ $a = -0.03182 - 1.98080I$ $b = 0.550237 + 1.300370I$	$7.41576 - 6.58321I$	0
$u = 0.114871 - 0.720135I$ $a = -0.03182 + 1.98080I$ $b = 0.550237 - 1.300370I$	$7.41576 + 6.58321I$	0
$u = 0.351793 + 0.590951I$ $a = -0.10506 + 1.82082I$ $b = -0.360927 - 1.349490I$	$3.01841 - 2.63877I$	0
$u = 0.351793 - 0.590951I$ $a = -0.10506 - 1.82082I$ $b = -0.360927 + 1.349490I$	$3.01841 + 2.63877I$	0
$u = -1.327140 + 0.014584I$ $a = -1.88231 + 0.42302I$ $b = -0.053802 - 0.861572I$	$0.47041 + 6.74381I$	0
$u = -1.327140 - 0.014584I$ $a = -1.88231 - 0.42302I$ $b = -0.053802 + 0.861572I$	$0.47041 - 6.74381I$	0
$u = 0.262945 + 0.616414I$ $a = -2.10232 + 2.36683I$ $b = 0.015632 - 1.219980I$	$6.85021 - 4.66073I$	0
$u = 0.262945 - 0.616414I$ $a = -2.10232 - 2.36683I$ $b = 0.015632 + 1.219980I$	$6.85021 + 4.66073I$	0
$u = 1.329540 + 0.095124I$ $a = 0.929518 - 0.191850I$ $b = 1.000780 - 0.423256I$	$-0.607150 - 1.109740I$	0
$u = 1.329540 - 0.095124I$ $a = 0.929518 + 0.191850I$ $b = 1.000780 + 0.423256I$	$-0.607150 + 1.109740I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.333530 + 0.040329I$ $a = 0.587200 + 0.036810I$ $b = 1.35622 - 1.13947I$	$1.19011 - 1.90299I$	0
$u = -1.333530 - 0.040329I$ $a = 0.587200 - 0.036810I$ $b = 1.35622 + 1.13947I$	$1.19011 + 1.90299I$	0
$u = -1.333000 + 0.230008I$ $a = 1.054960 + 0.765005I$ $b = 0.81399 - 1.29343I$	$2.88699 + 9.95019I$	0
$u = -1.333000 - 0.230008I$ $a = 1.054960 - 0.765005I$ $b = 0.81399 + 1.29343I$	$2.88699 - 9.95019I$	0
$u = 1.341420 + 0.193854I$ $a = 0.903653 - 0.557086I$ $b = 0.275026 + 0.815619I$	$-1.95121 - 1.33658I$	0
$u = 1.341420 - 0.193854I$ $a = 0.903653 + 0.557086I$ $b = 0.275026 - 0.815619I$	$-1.95121 + 1.33658I$	0
$u = 1.358650 + 0.106966I$ $a = -0.904994 - 0.219653I$ $b = -0.194170 - 1.017110I$	$1.65394 - 1.39071I$	0
$u = 1.358650 - 0.106966I$ $a = -0.904994 + 0.219653I$ $b = -0.194170 + 1.017110I$	$1.65394 + 1.39071I$	0
$u = -0.592092 + 0.221364I$ $a = 0.052072 + 1.246130I$ $b = 0.662794 + 0.347988I$	$2.24208 + 3.37065I$	$-4.00000 - 5.75675I$
$u = -0.592092 - 0.221364I$ $a = 0.052072 - 1.246130I$ $b = 0.662794 - 0.347988I$	$2.24208 - 3.37065I$	$-4.00000 + 5.75675I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.371290 + 0.051878I$ $a = 0.065385 + 0.438714I$ $b = 0.61251 - 2.18568I$	$0.93911 - 3.98308I$	0
$u = 1.371290 - 0.051878I$ $a = 0.065385 - 0.438714I$ $b = 0.61251 + 2.18568I$	$0.93911 + 3.98308I$	0
$u = -1.372810 + 0.037798I$ $a = 0.03694 + 1.45996I$ $b = -0.05136 - 1.62620I$	$2.21593 + 0.54322I$	0
$u = -1.372810 - 0.037798I$ $a = 0.03694 - 1.45996I$ $b = -0.05136 + 1.62620I$	$2.21593 - 0.54322I$	0
$u = -0.476540 + 0.391755I$ $a = 0.155313 - 0.074410I$ $b = -0.987024 + 0.180034I$	$-1.57068 + 3.54785I$	$-6.35480 - 10.17340I$
$u = -0.476540 - 0.391755I$ $a = 0.155313 + 0.074410I$ $b = -0.987024 - 0.180034I$	$-1.57068 - 3.54785I$	$-6.35480 + 10.17340I$
$u = -1.385030 + 0.101265I$ $a = -0.429680 - 1.218680I$ $b = -0.302767 + 1.261620I$	$-3.45355 + 3.71222I$	0
$u = -1.385030 - 0.101265I$ $a = -0.429680 + 1.218680I$ $b = -0.302767 - 1.261620I$	$-3.45355 - 3.71222I$	0
$u = 0.609207$ $a = 0.540750$ $b = -0.447332$	-1.11415	-9.92320
$u = -1.404830 + 0.005344I$ $a = 1.004270 - 0.956018I$ $b = 0.274246 + 0.967774I$	$-4.96359 + 2.05422I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.404830 - 0.005344I$ $a = 1.004270 + 0.956018I$ $b = 0.274246 - 0.967774I$	$-4.96359 - 2.05422I$	0
$u = -1.40742 + 0.14663I$ $a = -0.635566 - 0.606471I$ $b = -0.85324 + 1.52041I$	$-2.53143 + 5.14360I$	0
$u = -1.40742 - 0.14663I$ $a = -0.635566 + 0.606471I$ $b = -0.85324 - 1.52041I$	$-2.53143 - 5.14360I$	0
$u = 1.41489 + 0.04091I$ $a = -1.101290 + 0.645661I$ $b = -0.663322 - 1.121380I$	$-5.66604 - 2.49553I$	0
$u = 1.41489 - 0.04091I$ $a = -1.101290 - 0.645661I$ $b = -0.663322 + 1.121380I$	$-5.66604 + 2.49553I$	0
$u = 1.43348 + 0.07898I$ $a = 1.40726 - 1.33578I$ $b = 0.412663 + 1.258010I$	$-1.28880 - 8.09029I$	0
$u = 1.43348 - 0.07898I$ $a = 1.40726 + 1.33578I$ $b = 0.412663 - 1.258010I$	$-1.28880 + 8.09029I$	0
$u = -1.43702 + 0.20766I$ $a = -1.74439 - 0.47596I$ $b = -0.131205 + 1.056820I$	$1.32313 + 7.60879I$	0
$u = -1.43702 - 0.20766I$ $a = -1.74439 + 0.47596I$ $b = -0.131205 - 1.056820I$	$1.32313 - 7.60879I$	0
$u = -0.135763 + 0.492747I$ $a = -0.419702 + 0.679952I$ $b = 0.980114 - 0.157893I$	$3.83136 - 0.94632I$	$3.69353 - 2.08963I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.135763 - 0.492747I$ $a = -0.419702 - 0.679952I$ $b = 0.980114 + 0.157893I$	$3.83136 + 0.94632I$	$3.69353 + 2.08963I$
$u = 0.163689 + 0.480709I$ $a = 0.65194 + 2.56615I$ $b = -0.140064 - 0.870618I$	$1.41412 - 1.82766I$	$-0.64360 + 4.68630I$
$u = 0.163689 - 0.480709I$ $a = 0.65194 - 2.56615I$ $b = -0.140064 + 0.870618I$	$1.41412 + 1.82766I$	$-0.64360 - 4.68630I$
$u = 1.48897 + 0.14295I$ $a = -0.366890 + 0.148135I$ $b = -1.42428 + 0.08068I$	$-8.02010 - 5.56867I$	0
$u = 1.48897 - 0.14295I$ $a = -0.366890 - 0.148135I$ $b = -1.42428 - 0.08068I$	$-8.02010 + 5.56867I$	0
$u = 1.47816 + 0.23264I$ $a = 1.144460 - 0.645255I$ $b = 0.609383 + 1.267820I$	$2.32170 - 7.14117I$	0
$u = 1.47816 - 0.23264I$ $a = 1.144460 + 0.645255I$ $b = 0.609383 - 1.267820I$	$2.32170 + 7.14117I$	0
$u = -1.49434 + 0.20747I$ $a = -0.0467668 + 0.1043070I$ $b = -1.016830 - 0.565966I$	$-6.12896 + 4.38413I$	0
$u = -1.49434 - 0.20747I$ $a = -0.0467668 - 0.1043070I$ $b = -1.016830 + 0.565966I$	$-6.12896 - 4.38413I$	0
$u = 1.51233 + 0.07051I$ $a = -0.850042 - 0.283965I$ $b = -0.727153 - 0.665675I$	$-7.05549 - 3.14594I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.51233 - 0.07051I$ $a = -0.850042 + 0.283965I$ $b = -0.727153 + 0.665675I$	$-7.05549 + 3.14594I$	0
$u = 1.50792 + 0.20095I$ $a = 0.248901 - 0.248007I$ $b = 1.341120 - 0.039708I$	$-4.77289 - 12.16840I$	0
$u = 1.50792 - 0.20095I$ $a = 0.248901 + 0.248007I$ $b = 1.341120 + 0.039708I$	$-4.77289 + 12.16840I$	0
$u = -1.51476 + 0.14502I$ $a = 0.264739 - 0.299134I$ $b = 0.796126 + 0.659011I$	$-6.95112 + 2.06444I$	0
$u = -1.51476 - 0.14502I$ $a = 0.264739 + 0.299134I$ $b = 0.796126 - 0.659011I$	$-6.95112 - 2.06444I$	0
$u = -1.52400 + 0.10670I$ $a = -0.184813 - 0.090273I$ $b = -1.056070 - 0.115666I$	$-8.52441 + 1.00167I$	0
$u = -1.52400 - 0.10670I$ $a = -0.184813 + 0.090273I$ $b = -1.056070 + 0.115666I$	$-8.52441 - 1.00167I$	0
$u = -1.50178 + 0.29232I$ $a = -0.758450 - 1.138580I$ $b = -0.56217 + 1.31818I$	$-4.76063 + 6.76009I$	0
$u = -1.50178 - 0.29232I$ $a = -0.758450 + 1.138580I$ $b = -0.56217 - 1.31818I$	$-4.76063 - 6.76009I$	0
$u = -1.50017 + 0.33374I$ $a = 0.94585 + 1.25725I$ $b = 0.423389 - 1.318380I$	$-3.92143 + 9.46474I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.50017-0.33374I$ $a=\ \ 0.94585-1.25725I$ $b=\ \ 0.423389+1.318380I$	$-3.92143-9.46474I$	0
$u=-1.49391+0.36272I$ $a=-0.691558-1.038670I$ $b=-0.682500+1.081280I$	$-4.43943+10.49490I$	0
$u=-1.49391-0.36272I$ $a=-0.691558+1.038670I$ $b=-0.682500-1.081280I$	$-4.43943-10.49490I$	0
$u=-1.53296+0.19544I$ $a=\ \ 0.303820+0.201082I$ $b=\ \ 0.770547+0.026111I$	$-7.97843+5.01067I$	0
$u=-1.53296-0.19544I$ $a=\ \ 0.303820-0.201082I$ $b=\ \ 0.770547-0.026111I$	$-7.97843-5.01067I$	0
$u=-1.52256+0.31925I$ $a=\ \ 0.783366+0.821509I$ $b=\ \ 0.505391-0.986115I$	$-5.89368+6.90189I$	0
$u=-1.52256-0.31925I$ $a=\ \ 0.783366-0.821509I$ $b=\ \ 0.505391+0.986115I$	$-5.89368-6.90189I$	0
$u=\ \ 1.55573+0.00457I$ $a=\ \ 0.285248-0.546406I$ $b=\ \ 0.637687-0.017128I$	$-4.97142-4.01378I$	0
$u=\ \ 1.55573-0.00457I$ $a=\ \ 0.285248+0.546406I$ $b=\ \ 0.637687+0.017128I$	$-4.97142+4.01378I$	0
$u=\ \ 1.54949+0.28403I$ $a=-0.883549+0.876103I$ $b=-0.65702-1.37402I$	$-3.98685-12.53700I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.54949 - 0.28403I$ $a = -0.883549 - 0.876103I$ $b = -0.65702 + 1.37402I$	$-3.98685 + 12.53700I$	0
$u = -0.401690 + 0.132674I$ $a = -1.72929 + 0.28563I$ $b = -0.574527 + 0.827043I$	$-0.54692 + 2.29604I$	$1.45935 + 11.26789I$
$u = -0.401690 - 0.132674I$ $a = -1.72929 - 0.28563I$ $b = -0.574527 - 0.827043I$	$-0.54692 - 2.29604I$	$1.45935 - 11.26789I$
$u = 0.116136 + 0.405794I$ $a = 1.51229 - 0.51428I$ $b = -0.010360 - 0.160570I$	$-0.252568 - 1.384130I$	$-3.29769 + 2.91676I$
$u = 0.116136 - 0.405794I$ $a = 1.51229 + 0.51428I$ $b = -0.010360 + 0.160570I$	$-0.252568 + 1.384130I$	$-3.29769 - 2.91676I$
$u = 1.54587 + 0.32785I$ $a = 0.902165 - 1.036600I$ $b = 0.63663 + 1.40336I$	$-0.5079 - 18.9585I$	0
$u = 1.54587 - 0.32785I$ $a = 0.902165 + 1.036600I$ $b = 0.63663 - 1.40336I$	$-0.5079 + 18.9585I$	0
$u = -1.60227 + 0.10254I$ $a = 0.595130 - 0.352778I$ $b = 0.069326 - 0.869851I$	$-5.91736 + 3.60682I$	0
$u = -1.60227 - 0.10254I$ $a = 0.595130 + 0.352778I$ $b = 0.069326 + 0.869851I$	$-5.91736 - 3.60682I$	0
$u = 1.59497 + 0.36952I$ $a = 0.307920 - 0.895269I$ $b = 0.399654 + 0.950414I$	$-2.57319 + 0.53784I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.59497 - 0.36952I$ $a = 0.307920 + 0.895269I$ $b = 0.399654 - 0.950414I$	$-2.57319 - 0.53784I$	0
$u = 1.56695 + 0.57517I$ $a = -0.321654 + 1.049090I$ $b = -0.251618 - 1.040620I$	$-2.96796 - 4.31699I$	0
$u = 1.56695 - 0.57517I$ $a = -0.321654 - 1.049090I$ $b = -0.251618 + 1.040620I$	$-2.96796 + 4.31699I$	0
$u = 0.014572 + 0.263358I$ $a = 0.64043 - 1.81306I$ $b = 0.72079 + 1.59382I$	$5.42384 + 3.02086I$	$25.2643 - 7.3345I$
$u = 0.014572 - 0.263358I$ $a = 0.64043 + 1.81306I$ $b = 0.72079 - 1.59382I$	$5.42384 - 3.02086I$	$25.2643 + 7.3345I$
$u = -0.186558 + 0.174265I$ $a = 3.89098 + 7.58041I$ $b = 0.318668 - 1.060700I$	$4.17910 + 7.06432I$	$-5.3223 - 13.1258I$
$u = -0.186558 - 0.174265I$ $a = 3.89098 - 7.58041I$ $b = 0.318668 + 1.060700I$	$4.17910 - 7.06432I$	$-5.3223 + 13.1258I$
$u = -0.105013 + 0.170958I$ $a = -5.70928 + 0.50634I$ $b = -0.032596 + 1.383050I$	$6.60511 + 0.07586I$	$6.10031 - 0.13311I$
$u = -0.105013 - 0.170958I$ $a = -5.70928 - 0.50634I$ $b = -0.032596 - 1.383050I$	$6.60511 - 0.07586I$	$6.10031 + 0.13311I$
$u = -0.144821 + 0.087119I$ $a = -5.75700 - 3.52265I$ $b = -0.383727 + 0.842523I$	$-0.46416 + 1.91834I$	$-10.08682 - 1.92617I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.144821-0.087119I$ $a=-5.75700+3.52265I$ $b=-0.383727-0.842523I$	$-0.46416-1.91834I$	$-10.08682+1.92617I$
$u=\ \ 1.94618+0.18830I$ $a=\ \ 0.069663-0.568994I$ $b=-0.014874+0.793607I$	$-4.42032-2.85190I$	0
$u=\ \ 1.94618-0.18830I$ $a=\ \ 0.069663+0.568994I$ $b=-0.014874-0.793607I$	$-4.42032+2.85190I$	0

II.

$$\boldsymbol{I_2^u = \langle 6.76\times10^6u^{24} + 2.51\times10^7u^{23} + \cdots + 3.26\times10^4b - 5.18\times10^6,\ -3.45\times10^6u^{24} - 1.23\times10^7u^{23} + \cdots + 3.26\times10^4a + 2.50\times10^6,\ u^{25} + 5u^{24} + \cdots - 7u - 1\rangle}$$

(i) Arc colorings

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}105.856u^{24} + 377.928u^{23} + \cdots - 471.470u - 76.6240\\-207.390u^{24} - 768.771u^{23} + \cdots + 989.824u + 158.744\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-u^2+1\\-u^4+2u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-101.534u^{24} - 390.842u^{23} + \cdots + 518.354u + 82.1204\\-207.390u^{24} - 768.771u^{23} + \cdots + 989.824u + 158.744\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-126.101u^{24} - 428.768u^{23} + \cdots + 505.785u + 79.1843\\-110.665u^{24} - 377.553u^{23} + \cdots + 441.192u + 67.7447\end{pmatrix}$$
$$a_3 = \begin{pmatrix}104.413u^{24} + 375.596u^{23} + \cdots - 470.119u - 76.7317\\-366.857u^{24} - 1339.83u^{23} + \cdots + 1696.98u + 271.157\end{pmatrix}$$
$$a_7 = \begin{pmatrix}34.6235u^{24} + 142.131u^{23} + \cdots - 212.691u - 32.7237\\585.335u^{24} + 2117.45u^{23} + \cdots - 2654.81u - 420.255\end{pmatrix}$$
$$a_6 = \begin{pmatrix}250.131u^{24} + 911.029u^{23} + \cdots - 1160.99u - 185.716\\-44.7226u^{24} - 177.047u^{23} + \cdots + 241.920u + 41.1168\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}8.33571u^{24} + 27.3502u^{23} + \cdots - 30.3192u - 3.78842\\-31.9865u^{24} - 139.417u^{23} + \cdots + 217.641u + 34.6235\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{16873930}{32603}u^{24} + \frac{57225794}{32603}u^{23} + \cdots - \frac{65295295}{32603}u - \frac{10504251}{32603}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{25} - 2u^{24} + \cdots + 8u - 1$
c_2	$u^{25} + 3u^{24} + \cdots - 9u^2 + 1$
c_3	$u^{25} - 2u^{24} + \cdots + u - 1$
c_4	$u^{25} - 2u^{24} + \cdots - 4u + 1$
c_5	$u^{25} - 2u^{24} + \cdots - u - 1$
c_6	$u^{25} - 3u^{24} + \cdots + 9u^2 - 1$
c_7	$u^{25} + 2u^{24} + \cdots - 4u - 1$
c_8, c_9	$u^{25} + 5u^{24} + \cdots - 7u - 1$
c_{10}	$u^{25} - 5u^{24} + \cdots + 5u - 1$
c_{11}	$u^{25} + 2u^{23} + \cdots + 3u + 1$
c_{12}	$u^{25} - 5u^{24} + \cdots - 7u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{25} - 6y^{24} + \cdots + 16y - 1$
c_2, c_6	$y^{25} - 11y^{24} + \cdots + 18y - 1$
c_3	$y^{25} + 12y^{24} + \cdots - 17y - 1$
c_4, c_7	$y^{25} + 22y^{24} + \cdots - 2y - 1$
c_5	$y^{25} + 4y^{24} + \cdots - 15y - 1$
c_8, c_9, c_{12}	$y^{25} - 31y^{24} + \cdots + 31y - 1$
c_{10}	$y^{25} - 3y^{24} + \cdots - 5y - 1$
c_{11}	$y^{25} + 4y^{24} + \cdots + 3y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.298541 + 1.027340I$ $a = -0.06383 + 1.76347I$ $b = -0.275475 - 1.053730I$	$1.21436 - 3.36231I$	$-4.23447 + 8.76870I$
$u = 0.298541 - 1.027340I$ $a = -0.06383 - 1.76347I$ $b = -0.275475 + 1.053730I$	$1.21436 + 3.36231I$	$-4.23447 - 8.76870I$
$u = 0.661162 + 0.586105I$ $a = 0.374120 - 1.007700I$ $b = -0.285215 + 0.529958I$	$-0.390506 - 0.796360I$	$-8.99184 + 1.29305I$
$u = 0.661162 - 0.586105I$ $a = 0.374120 + 1.007700I$ $b = -0.285215 - 0.529958I$	$-0.390506 + 0.796360I$	$-8.99184 - 1.29305I$
$u = 1.11819$ $a = 1.82102$ $b = 0.341509$	-0.134992	10.0610
$u = -1.366610 + 0.028855I$ $a = 0.515700 - 0.511164I$ $b = 0.72419 + 1.80510I$	$0.98406 + 3.43301I$	$-60.10 + 0.511542I$
$u = -1.366610 - 0.028855I$ $a = 0.515700 + 0.511164I$ $b = 0.72419 - 1.80510I$	$0.98406 - 3.43301I$	$-60.10 - 0.511542I$
$u = -1.398330 + 0.168604I$ $a = 1.74303 + 0.87672I$ $b = 0.460302 - 1.077380I$	$0.16949 + 8.89961I$	$-4.00000 - 9.54946I$
$u = -1.398330 - 0.168604I$ $a = 1.74303 - 0.87672I$ $b = 0.460302 + 1.077380I$	$0.16949 - 8.89961I$	$-4.00000 + 9.54946I$
$u = 1.40218 + 0.24784I$ $a = -0.430179 + 0.875308I$ $b = -0.329714 - 1.227330I$	$-2.17602 - 3.60162I$	$-4.00000 + 1.95348I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.40218 - 0.24784I$ $a = -0.430179 - 0.875308I$ $b = -0.329714 + 1.227330I$	$-2.17602 + 3.60162I$	$-4.00000 - 1.95348I$
$u = -0.169775 + 0.539626I$ $a = -1.32853 - 3.37395I$ $b = 0.279532 + 1.025430I$	$4.59302 - 6.54943I$	$2.35710 + 3.53999I$
$u = -0.169775 - 0.539626I$ $a = -1.32853 + 3.37395I$ $b = 0.279532 - 1.025430I$	$4.59302 + 6.54943I$	$2.35710 - 3.53999I$
$u = -1.52649 + 0.08191I$ $a = -0.709019 + 0.514080I$ $b = -0.540835 + 0.432994I$	$-7.20434 + 3.67523I$	$-12.3858 - 8.5099I$
$u = -1.52649 - 0.08191I$ $a = -0.709019 - 0.514080I$ $b = -0.540835 - 0.432994I$	$-7.20434 - 3.67523I$	$-12.3858 + 8.5099I$
$u = 0.411616 + 0.217187I$ $a = -1.81390 - 0.21549I$ $b = -0.514630 - 0.717296I$	$-0.61285 - 2.55011I$	$-7.6321 + 17.9745I$
$u = 0.411616 - 0.217187I$ $a = -1.81390 + 0.21549I$ $b = -0.514630 + 0.717296I$	$-0.61285 + 2.55011I$	$-7.6321 - 17.9745I$
$u = -1.53548 + 0.16663I$ $a = -0.215309 + 0.195137I$ $b = -0.708315 - 0.330475I$	$-7.56957 + 3.45249I$	0
$u = -1.53548 - 0.16663I$ $a = -0.215309 - 0.195137I$ $b = -0.708315 + 0.330475I$	$-7.56957 - 3.45249I$	0
$u = -1.50652 + 0.34579I$ $a = -0.790881 - 1.108830I$ $b = -0.486612 + 1.227370I$	$-4.77229 + 8.14428I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.50652-0.34579I$ $a=-0.790881+1.108830I$ $b=-0.486612-1.227370I$	$-4.77229-8.14428I$	0
$u=-0.178079+0.099223I$ $a=-1.40410-0.68529I$ $b=\ \ 0.49534-1.50963I$	$5.20429-3.01827I$	$-11.79399+6.31118I$
$u=-0.178079-0.099223I$ $a=-1.40410+0.68529I$ $b=\ \ 0.49534+1.50963I$	$5.20429+3.01827I$	$-11.79399-6.31118I$
$u=\ \ 1.84870+0.23184I$ $a=\ \ 0.212393-0.429879I$ $b=\ \ 0.010682+0.845722I$	$-4.17657-2.99878I$	0
$u=\ \ 1.84870-0.23184I$ $a=\ \ 0.212393+0.429879I$ $b=\ \ 0.010682-0.845722I$	$-4.17657+2.99878I$	0

III. $\boldsymbol{I_3^u = \langle -6a^3 + 2a^2 + b - 27a - 9,\ 2a^4 + 9a^2 + 6a + 1,\ u - 1\rangle}$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} a \\ 6a^3 - 2a^2 + 27a + 9 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 6a^3 - 2a^2 + 28a + 9 \\ 6a^3 - 2a^2 + 27a + 9 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2a^3 + 9a + 4 \\ 2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 6a^3 - 2a^2 + 28a + 9 \\ 12a^3 - 4a^2 + 55a + 18 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2a^3 + 9a + 4 \\ 2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -4a^3 + 2a^2 - 19a - 5 \\ -12a^3 + 4a^2 - 55a - 16 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 4a^3 - 2a^2 + 18a + 7 \\ 4a^3 + 18a + 9 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 0$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_7	$(y+2)^4$
c_2, c_6, c_8 c_9, c_{12}	$(y-1)^4$
c_3, c_5	$4(4y^4+20y^3+37y^2+26y+9)$
c_{10}, c_{11}	$y^4-10y^3+37y^2-52y+36$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = -0.319193 + 0.046988I$ $b = 1.414210I$	4.93480	0
$u = 1.00000$ $a = -0.319193 - 0.046988I$ $b = -1.414210I$	4.93480	0
$u = 1.00000$ $a = 0.31919 + 2.16831I$ $b = -1.414210I$	4.93480	0
$u = 1.00000$ $a = 0.31919 - 2.16831I$ $b = 1.414210I$	4.93480	0

IV. $I_4^u = \langle b,\ a-1,\ u-1 \rangle$

(i) Arc colorings

$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

$a_{12} = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$

$a_9 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$

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

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

$a_{10} = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$

$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

$a_2 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$

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

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

$a_6 = \begin{pmatrix} 2 \\ 1 \end{pmatrix}$

$a_{11} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 0$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4, c_7	y
c_2, c_3, c_5 c_6, c_8, c_9 c_{10}, c_{11}, c_{12}	$y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u		$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	1.00000		
$a =$	1.00000	0	0
$b =$	0		

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u(u^2+2)^2(u^{25}-2u^{24}+\cdots+8u-1)$ $\cdot(u^{133}-15u^{132}+\cdots+11068u-1172)$
c_2	$((u-1)^4)(u+1)(u^{25}+3u^{24}+\cdots-9u^2+1)$ $\cdot(u^{133}-3u^{132}+\cdots-17081u+1539)$
c_3	$4(u-1)(2u^4+5u^2-2u+3)(u^{25}-2u^{24}+\cdots+u-1)$ $\cdot(2u^{133}+2u^{132}+\cdots+11264u+2048)$
c_4	$u(u^2+2)^2(u^{25}-2u^{24}+\cdots-4u+1)$ $\cdot(u^{133}-9u^{132}+\cdots-24896u+1952)$
c_5	$4(u-1)(2u^4+5u^2+2u+3)(u^{25}-2u^{24}+\cdots-u-1)$ $\cdot(2u^{133}+2u^{132}+\cdots+7848686u+3253981)$
c_6	$(u-1)(u+1)^4(u^{25}-3u^{24}+\cdots+9u^2-1)$ $\cdot(u^{133}-3u^{132}+\cdots-17081u+1539)$
c_7	$u(u^2+2)^2(u^{25}+2u^{24}+\cdots-4u-1)$ $\cdot(u^{133}-9u^{132}+\cdots-24896u+1952)$
c_8, c_9	$((u-1)^5)(u^{25}+5u^{24}+\cdots-7u-1)(u^{133}+5u^{132}+\cdots-56u+3)$
c_{10}	$(u-1)(u^4-2u^3+\cdots+4u+6)(u^{25}-5u^{24}+\cdots+5u-1)$ $\cdot(u^{133}+7u^{132}+\cdots+62070u+9146)$
c_{11}	$(u+1)(u^4-2u^3+\cdots+4u+6)(u^{25}+2u^{23}+\cdots+3u+1)$ $\cdot(u^{133}+7u^{130}+\cdots+14366u+3254)$
c_{12}	$((u+1)^5)(u^{25}-5u^{24}+\cdots-7u+1)(u^{133}+5u^{132}+\cdots-56u+3)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y(y+2)^4(y^{25}-6y^{24}+\cdots+16y-1)$ $\cdot(y^{133}-7y^{132}+\cdots-104928320y-1373584)$
c_2, c_6	$((y-1)^5)(y^{25}-11y^{24}+\cdots+18y-1)$ $\cdot(y^{133}-77y^{132}+\cdots+162555355y-2368521)$
c_3	$16(y-1)(4y^4+20y^3+\cdots+26y+9)(y^{25}+12y^{24}+\cdots-17y-1)$ $\cdot(4y^{133}+192y^{132}+\cdots-110100480y-4194304)$
c_4, c_7	$y(y+2)^4(y^{25}+22y^{24}+\cdots-2y-1)$ $\cdot(y^{133}+93y^{132}+\cdots-337168896y-3810304)$
c_5	$16(y-1)(4y^4+20y^3+\cdots+26y+9)(y^{25}+4y^{24}+\cdots-15y-1)$ $\cdot(4y^{133}+240y^{132}+\cdots-532285298173316y-10588392348361)$
c_8, c_9, c_{12}	$((y-1)^5)(y^{25}-31y^{24}+\cdots+31y-1)(y^{133}-137y^{132}+\cdots-56y-9)$
c_{10}	$(y-1)(y^4-10y^3+\cdots-52y+36)(y^{25}-3y^{24}+\cdots-5y-1)$ $\cdot(y^{133}-51y^{132}+\cdots+15173548824y-83649316)$
c_{11}	$(y-1)(y^4-10y^3+\cdots-52y+36)(y^{25}+4y^{24}+\cdots+3y-1)$ $\cdot(y^{133}+108y^{131}+\cdots-2741332040y-10588516)$