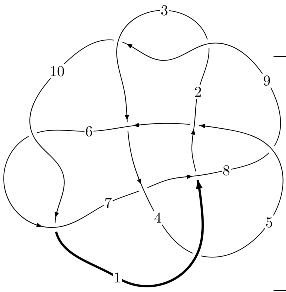
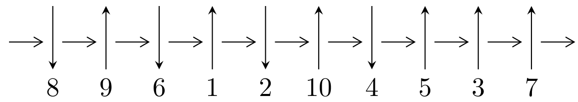
10_{116} $(K10a_{120})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -3043u^{15} + 828u^{14} + \cdots + 761b - 4040,\ 1027u^{15} - 1203u^{14} + \cdots + 761a + 653,$$
$$u^{16} - u^{15} + u^{14} - 2u^{13} + 7u^{12} - 8u^{11} + 7u^{10} - 6u^9 + 6u^8 + 7u^7 - 24u^6 + 32u^5 - 27u^4 + 20u^3 - 12u^2 + 5u -$$
$$I_2^u = \langle 6.18811 \times 10^{62}u^{35} - 2.36237 \times 10^{62}u^{34} + \cdots + 2.97721 \times 10^{61}b + 3.69879 \times 10^{62},$$
$$- 3.31586 \times 10^{63}u^{35} + 1.45172 \times 10^{63}u^{34} + \cdots + 2.97721 \times 10^{61}a - 1.62016 \times 10^{63},\ u^{36} - u^{35} + \cdots + 10u -$$
$$I_3^u = \langle u^3 + u^2 + b + 1,\ -u^4 - 2u^3 - u^2 + a - u - 1,\ u^5 + u^4 + u^3 + 2u^2 + u + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 57 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. $\boldsymbol{I_1^u = \langle -3043u^{15} + 828u^{14} + \cdots + 761b - 4040,\ 1027u^{15} - 1203u^{14} + \cdots + 761a + 653,\ u^{16} - u^{15} + \cdots + 5u - 1\rangle}$

(i) Arc colorings

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

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

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.34954u^{15} + 1.58081u^{14} + \cdots + 8.93955u - 0.858081 \\ 3.99869u^{15} - 1.08804u^{14} + \cdots - 20.1130u + 5.30880 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 2.64915u^{15} + 0.492773u^{14} + \cdots - 11.1735u + 4.45072 \\ 3.99869u^{15} - 1.08804u^{14} + \cdots - 20.1130u + 5.30880 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2.30092u^{15} + 1.16163u^{14} + \cdots - 4.12089u + 2.28384 \\ 3.80158u^{15} - 2.29435u^{14} + \cdots - 22.0644u + 5.62943 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 6.61367u^{15} - 1.88436u^{14} + \cdots - 31.2247u + 9.78844 \\ 5.73456u^{15} - 1.78449u^{14} + \cdots - 25.8279u + 7.37845 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 3.15112u^{15} - 1.87516u^{14} + \cdots - 22.0039u + 7.48752 \\ 4.22733u^{15} + 0.231275u^{14} + \cdots - 12.4494u + 3.57687 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 4.03022u^{15} - 1.97503u^{14} + \cdots - 25.4008u + 8.89750 \\ 5.50329u^{15} - 0.279895u^{14} + \cdots - 20.7175u + 6.72799 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -5.53482u^{15} + 2.16689u^{14} + \cdots + 32.0053u - 10.3167 \\ -7.74901u^{15} + 1.81603u^{14} + \cdots + 34.5848u - 9.98160 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{13489}{761}u^{15} + \frac{456}{761}u^{14} + \cdots - \frac{54502}{761}u + \frac{17914}{761}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} + 8u^{15} + \cdots - 22u - 4$
c_2, c_6, c_9 c_{10}	$u^{16} - 8u^{14} + \cdots + 4u + 1$
c_3	$u^{16} - 12u^{15} + \cdots + 112u - 16$
c_4, c_8	$u^{16} - u^{15} + \cdots + 5u - 1$
c_5, c_7	$u^{16} - u^{15} + \cdots + 5u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{16} - 2y^{15} + \cdots - 44y + 16$
c_2, c_6, c_9 c_{10}	$y^{16} - 16y^{15} + \cdots - 18y + 1$
c_3	$y^{16} + 46y^{14} + \cdots + 1632y + 256$
c_4, c_8	$y^{16} - 11y^{15} + \cdots - 17y + 1$
c_5, c_7	$y^{16} + y^{15} + \cdots - y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.848485 + 0.598766I$ $a = -0.483988 - 0.792063I$ $b = 1.362100 + 0.075359I$	$7.97491 + 0.20600I$	$9.94793 + 0.07278I$
$u = 0.848485 - 0.598766I$ $a = -0.483988 + 0.792063I$ $b = 1.362100 - 0.075359I$	$7.97491 - 0.20600I$	$9.94793 - 0.07278I$
$u = 0.846121 + 0.652012I$ $a = -0.284195 + 0.129063I$ $b = 0.014022 + 0.906951I$	$-2.23601 - 4.95570I$	$-0.99614 + 6.15512I$
$u = 0.846121 - 0.652012I$ $a = -0.284195 - 0.129063I$ $b = 0.014022 - 0.906951I$	$-2.23601 + 4.95570I$	$-0.99614 - 6.15512I$
$u = 0.664815 + 0.989330I$ $a = 1.38574 + 1.59724I$ $b = -1.227900 - 0.015479I$	$6.88399 - 4.31481I$	$8.84422 + 5.32763I$
$u = 0.664815 - 0.989330I$ $a = 1.38574 - 1.59724I$ $b = -1.227900 + 0.015479I$	$6.88399 + 4.31481I$	$8.84422 - 5.32763I$
$u = -1.20069$ $a = 0.395416$ $b = 0.206535$	-2.54477	-11.1320
$u = -0.207234 + 0.684921I$ $a = 0.548174 - 0.525931I$ $b = 0.034860 - 0.480524I$	$0.24918 + 1.55875I$	$1.96281 - 3.40867I$
$u = -0.207234 - 0.684921I$ $a = 0.548174 + 0.525931I$ $b = 0.034860 + 0.480524I$	$0.24918 - 1.55875I$	$1.96281 + 3.40867I$
$u = -0.539685 + 1.175220I$ $a = -1.351880 + 0.225032I$ $b = 1.48126 + 0.46974I$	$8.92084 + 7.21911I$	$9.60333 - 5.50334I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.539685 - 1.175220I$ $a = -1.351880 - 0.225032I$ $b = 1.48126 - 0.46974I$	$8.92084 - 7.21911I$	$9.60333 + 5.50334I$
$u = 0.435669 + 0.469034I$ $a = 1.43102 + 0.27627I$ $b = -0.975942 - 0.412090I$	$1.82506 + 0.80819I$	$2.13059 - 1.11047I$
$u = 0.435669 - 0.469034I$ $a = 1.43102 - 0.27627I$ $b = -0.975942 + 0.412090I$	$1.82506 - 0.80819I$	$2.13059 + 1.11047I$
$u = 0.491705$ $a = 1.58325$ $b = 1.37840$	7.98963	11.0630
$u = -1.19368 + 1.15575I$ $a = 1.265790 - 0.496149I$ $b = -1.48086 - 0.47484I$	$7.3807 + 15.4239I$	$6.04190 - 8.21765I$
$u = -1.19368 - 1.15575I$ $a = 1.265790 + 0.496149I$ $b = -1.48086 + 0.47484I$	$7.3807 - 15.4239I$	$6.04190 + 8.21765I$

II.
$$I^u_2 = \langle 6.19\times10^{62}u^{35} - 2.36\times10^{62}u^{34} + \cdots + 2.98\times10^{61}b + 3.70\times10^{62},\ -3.32\times10^{63}u^{35} + 1.45\times10^{63}u^{34} + \cdots + 2.98\times10^{61}a - 1.62\times10^{63},\ u^{36} - u^{35} + \cdots + 10u - 1\rangle$$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 111.375u^{35} - 48.7610u^{34} + \cdots - 994.024u + 54.4186 \\ -20.7849u^{35} + 7.93485u^{34} + \cdots + 169.058u - 12.4237 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 90.5899u^{35} - 40.8261u^{34} + \cdots - 824.966u + 41.9949 \\ -20.7849u^{35} + 7.93485u^{34} + \cdots + 169.058u - 12.4237 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 127.801u^{35} - 63.0263u^{34} + \cdots - 1401.07u + 104.182 \\ -17.1954u^{35} + 3.98736u^{34} + \cdots + 56.1564u + 2.58762 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 139.120u^{35} - 113.959u^{34} + \cdots - 3359.17u + 420.231 \\ -14.0536u^{35} + 1.68584u^{34} + \cdots - 31.6498u + 23.1947 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 11.6449u^{35} - 27.9211u^{34} + \cdots - 993.769u + 159.766 \\ 11.5499u^{35} - 9.32721u^{34} + \cdots - 283.605u + 40.5313 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 212.315u^{35} - 128.741u^{34} + \cdots - 3334.38u + 333.144 \\ 7.82658u^{35} - 18.5212u^{34} + \cdots - 651.775u + 104.189 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -221.628u^{35} + 135.661u^{34} + \cdots + 3518.02u - 353.253 \\ -11.7841u^{35} + 22.6573u^{34} + \cdots + 774.893u - 121.309 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 330.335u^{35} - 202.439u^{34} + \cdots - 5559.19u + 624.963$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{18} - 4u^{17} + \cdots + 7u^2 - 1)^2$
c_2, c_6, c_9 c_{10}	$u^{36} - u^{35} + \cdots + 8u - 1$
c_3	$(u^{18} + 6u^{17} + \cdots - 2u + 1)^2$
c_4, c_8	$u^{36} - u^{35} + \cdots + 48u + 11$
c_5, c_7	$u^{36} - u^{35} + \cdots + 10u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18} - 2y^{17} + \cdots - 14y + 1)^2$
c_2, c_6, c_9 c_{10}	$y^{36} - 25y^{35} + \cdots + 182y^2 + 1$
c_3	$(y^{18} + 10y^{17} + \cdots - 2y + 1)^2$
c_4, c_8	$y^{36} - y^{35} + \cdots - 2172y + 121$
c_5, c_7	$y^{36} + 3y^{35} + \cdots - 16y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.158101 + 0.999960I$ $a = -0.688269 + 0.878262I$ $b = -0.144717 - 0.202993I$	$3.61069 + 4.86887I$	$5.80133 - 5.50961I$
$u = 0.158101 - 0.999960I$ $a = -0.688269 - 0.878262I$ $b = -0.144717 + 0.202993I$	$3.61069 - 4.86887I$	$5.80133 + 5.50961I$
$u = -1.103570 + 0.154303I$ $a = 0.362077 + 0.101877I$ $b = 0.191935 + 0.345407I$	-2.50163	$-7.03291 + 0.I$
$u = -1.103570 - 0.154303I$ $a = 0.362077 - 0.101877I$ $b = 0.191935 - 0.345407I$	-2.50163	$-7.03291 + 0.I$
$u = 0.883024 + 0.688109I$ $a = -0.157240 - 0.022105I$ $b = 0.337991 - 1.169730I$	$1.71711 - 9.65993I$	$2.00000 + 8.40253I$
$u = 0.883024 - 0.688109I$ $a = -0.157240 + 0.022105I$ $b = 0.337991 + 1.169730I$	$1.71711 + 9.65993I$	$2.00000 - 8.40253I$
$u = 0.820566 + 0.255749I$ $a = 1.57258 - 0.35860I$ $b = -0.403597 - 0.037486I$	$2.38258 + 0.03013I$	$10.67881 + 5.21291I$
$u = 0.820566 - 0.255749I$ $a = 1.57258 + 0.35860I$ $b = -0.403597 + 0.037486I$	$2.38258 - 0.03013I$	$10.67881 - 5.21291I$
$u = -0.921692 + 0.708492I$ $a = 0.267893 - 0.004765I$ $b = -0.127834 - 0.725445I$	$-0.67024 + 2.84508I$	$0. - 6.07527I$
$u = -0.921692 - 0.708492I$ $a = 0.267893 + 0.004765I$ $b = -0.127834 + 0.725445I$	$-0.67024 - 2.84508I$	$0. + 6.07527I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.767470+0.046363I$ $a=-1.032070+0.735712I$ $b=-0.382244+0.806713I$	$1.54929+2.22734I$	$0.12301-5.32226I$
$u=-0.767470-0.046363I$ $a=-1.032070-0.735712I$ $b=-0.382244-0.806713I$	$1.54929-2.22734I$	$0.12301+5.32226I$
$u=\ 0.834176+0.932639I$ $a=-1.10926-0.94801I$ $b=\ 1.219430-0.325722I$	$3.61069-4.86887I$	0
$u=\ 0.834176-0.932639I$ $a=-1.10926+0.94801I$ $b=\ 1.219430+0.325722I$	$3.61069+4.86887I$	0
$u=\ 0.921338+0.868395I$ $a=\ 1.151520+0.687508I$ $b=-1.48314+0.56763I$	$8.10049-6.17775I$	0
$u=\ 0.921338-0.868395I$ $a=\ 1.151520-0.687508I$ $b=-1.48314-0.56763I$	$8.10049+6.17775I$	0
$u=\ 0.701915$ $a=-1.28298$ $b=\ 1.94980$	4.48911	-3.44630
$u=\ 0.87912+1.26708I$ $a=-1.66440-0.48535I$ $b=\ 1.338110-0.311895I$	$3.93390-6.62246I$	0
$u=\ 0.87912-1.26708I$ $a=-1.66440+0.48535I$ $b=\ 1.338110+0.311895I$	$3.93390+6.62246I$	0
$u=\ 0.351282+0.272277I$ $a=-3.31877-1.34102I$ $b=\ 0.963504-0.239682I$	$-0.67024-2.84508I$	$-1.12939+6.07527I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.351282 - 0.272277I$ $a = -3.31877 + 1.34102I$ $b = 0.963504 + 0.239682I$	$-0.67024 + 2.84508I$	$-1.12939 - 6.07527I$
$u = 0.367259 + 0.202636I$ $a = 0.364325 + 0.477560I$ $b = -1.48378 + 0.18266I$	$2.38258 - 0.03013I$	$10.67881 - 5.21291I$
$u = 0.367259 - 0.202636I$ $a = 0.364325 - 0.477560I$ $b = -1.48378 - 0.18266I$	$2.38258 + 0.03013I$	$10.67881 + 5.21291I$
$u = -0.240979 + 0.319845I$ $a = -0.517042 - 0.064882I$ $b = 0.00271 + 1.70162I$	$3.05645 - 0.82042I$	$17.9553 - 12.9751I$
$u = -0.240979 - 0.319845I$ $a = -0.517042 + 0.064882I$ $b = 0.00271 - 1.70162I$	$3.05645 + 0.82042I$	$17.9553 + 12.9751I$
$u = 0.318952 + 0.240448I$ $a = 4.14019 + 3.24927I$ $b = -1.132980 + 0.371464I$	$3.93390 - 6.62246I$	$1.20464 + 6.87903I$
$u = 0.318952 - 0.240448I$ $a = 4.14019 - 3.24927I$ $b = -1.132980 - 0.371464I$	$3.93390 + 6.62246I$	$1.20464 - 6.87903I$
$u = -1.21553 + 1.27399I$ $a = -1.121660 + 0.382813I$ $b = 1.281050 + 0.414685I$	$1.71711 + 9.65993I$	0
$u = -1.21553 - 1.27399I$ $a = -1.121660 - 0.382813I$ $b = 1.281050 - 0.414685I$	$1.71711 - 9.65993I$	0
$u = 1.35664 + 1.18816I$ $a = 1.192410 + 0.304385I$ $b = -1.262280 + 0.182714I$	$1.54929 - 2.22734I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.35664 - 1.18816I$ $a = 1.192410 - 0.304385I$ $b = -1.262280 - 0.182714I$	$1.54929 + 2.22734I$	0
$u = -1.01692 + 1.56813I$ $a = -1.099020 + 0.434034I$ $b = 1.297910 - 0.112771I$	$8.10049 - 6.17775I$	0
$u = -1.01692 - 1.56813I$ $a = -1.099020 - 0.434034I$ $b = 1.297910 + 0.112771I$	$8.10049 + 6.17775I$	0
$u = -1.90022$ $a = 0.385753$ $b = -1.15448$	4.48911	0
$u = -0.52514 + 1.99611I$ $a = 1.105360 - 0.231720I$ $b = -1.109740 - 0.175458I$	$3.05645 + 0.82042I$	0
$u = -0.52514 - 1.99611I$ $a = 1.105360 + 0.231720I$ $b = -1.109740 + 0.175458I$	$3.05645 - 0.82042I$	0

III.

$\boldsymbol{I_3^u = \langle u^3 + u^2 + b + 1,\ -u^4 - 2u^3 - u^2 + a - u - 1,\ u^5 + u^4 + u^3 + 2u^2 + u + 1\rangle}$

(i) Arc colorings

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

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

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^4 + 2u^3 + u^2 + u + 1 \\ -u^3 - u^2 - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^4 + u^3 + u \\ -u^3 - u^2 - 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} u^3 + 1 \\ -u^3 - u^2 - 2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^3 + u^2 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^4 + u^3 + u^2 + u \\ -u^4 - u^3 - u^2 - 2u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^4 + u^2 + u + 1 \\ u^4 + u^3 + u - 1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^3 + 2u^2 + 2u + 2 \\ -u - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^4 + 2u^3 + 6u^2 + 2u + 16$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^5 - 3u^4 + 4u^3 - u^2 - u + 1$
c_2, c_{10}	$u^5 - 2u^3 + u^2 + 2u - 1$
c_3	$u^5 - 3u^4 + 7u^3 - 9u^2 + 4u - 1$
c_4, c_8	$u^5 + u^4 + u^3 - 2u^2 - u + 1$
c_5, c_7	$u^5 + u^4 + u^3 + 2u^2 + u + 1$
c_6, c_9	$u^5 - 2u^3 - u^2 + 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1$
c_2, c_6, c_9 c_{10}	$y^5 - 4y^4 + 8y^3 - 9y^2 + 6y - 1$
c_3	$y^5 + 5y^4 + 3y^3 - 31y^2 - 2y - 1$
c_4, c_8	$y^5 + y^4 + 3y^3 - 8y^2 + 5y - 1$
c_5, c_7	$y^5 + y^4 - y^3 - 4y^2 - 3y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.428550 + 1.039280I$ $a = -2.07758 - 0.76681I$ $b = 1.206350 - 0.340852I$	$5.20316 - 6.77491I$	$8.84849 + 7.92033I$
$u = 0.428550 - 1.039280I$ $a = -2.07758 + 0.76681I$ $b = 1.206350 + 0.340852I$	$5.20316 + 6.77491I$	$8.84849 - 7.92033I$
$u = -0.276511 + 0.728237I$ $a = 1.150990 + 0.252750I$ $b = -0.964913 + 0.621896I$	$2.50012 - 0.60716I$	$13.51752 - 1.76382I$
$u = -0.276511 - 0.728237I$ $a = 1.150990 - 0.252750I$ $b = -0.964913 - 0.621896I$	$2.50012 + 0.60716I$	$13.51752 + 1.76382I$
$u = -1.30408$ $a = -0.146833$ $b = -0.482881$	-2.24708	16.2680

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^5-3u^4+4u^3-u^2-u+1)(u^{16}+8u^{15}+\cdots-22u-4)$ $\cdot(u^{18}-4u^{17}+\cdots+7u^2-1)^2$
c_2, c_{10}	$(u^5-2u^3+u^2+2u-1)(u^{16}-8u^{14}+\cdots+4u+1)$ $\cdot(u^{36}-u^{35}+\cdots+8u-1)$
c_3	$(u^5-3u^4+7u^3-9u^2+4u-1)(u^{16}-12u^{15}+\cdots+112u-16)$ $\cdot(u^{18}+6u^{17}+\cdots-2u+1)^2$
c_4, c_8	$(u^5+u^4+u^3-2u^2-u+1)(u^{16}-u^{15}+\cdots+5u-1)$ $\cdot(u^{36}-u^{35}+\cdots+48u+11)$
c_5, c_7	$(u^5+u^4+u^3+2u^2+u+1)(u^{16}-u^{15}+\cdots+5u-1)$ $\cdot(u^{36}-u^{35}+\cdots+10u-1)$
c_6, c_9	$(u^5-2u^3-u^2+2u+1)(u^{16}-8u^{14}+\cdots+4u+1)$ $\cdot(u^{36}-u^{35}+\cdots+8u-1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)(y^{16} - 2y^{15} + \cdots - 44y + 16)$ $\cdot\,(y^{18} - 2y^{17} + \cdots - 14y + 1)^2$
c_2, c_6, c_9 c_{10}	$(y^5 - 4y^4 + 8y^3 - 9y^2 + 6y - 1)(y^{16} - 16y^{15} + \cdots - 18y + 1)$ $\cdot\,(y^{36} - 25y^{35} + \cdots + 182y^2 + 1)$
c_3	$(y^5 + 5y^4 + 3y^3 - 31y^2 - 2y - 1)(y^{16} + 46y^{14} + \cdots + 1632y + 256)$ $\cdot\,(y^{18} + 10y^{17} + \cdots - 2y + 1)^2$
c_4, c_8	$(y^5 + y^4 + 3y^3 - 8y^2 + 5y - 1)(y^{16} - 11y^{15} + \cdots - 17y + 1)$ $\cdot\,(y^{36} - y^{35} + \cdots - 2172y + 121)$
c_5, c_7	$(y^5 + y^4 - y^3 - 4y^2 - 3y - 1)(y^{16} + y^{15} + \cdots - y + 1)$ $\cdot\,(y^{36} + 3y^{35} + \cdots - 16y + 1)$