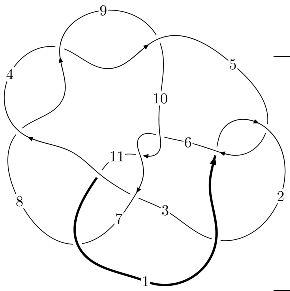
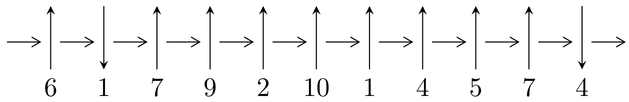
$11n_{109}$ ($K11n_{109}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3.53910 \times 10^{25} u^{37} - 4.74008 \times 10^{25} u^{36} + \cdots + 3.48267 \times 10^{25} b - 4.36228 \times 10^{24},$$
$$2.88601 \times 10^{25} u^{37} - 3.57200 \times 10^{25} u^{36} + \cdots + 3.48267 \times 10^{25} a + 4.29759 \times 10^{24},\ u^{38} - 2u^{37} + \cdots - 3u + 1$$
$$I_2^u = \langle -u^9 - 3u^7 + u^6 - 4u^5 + 2u^4 - 3u^3 + u^2 + b + 1,$$
$$u^9 + 3u^8 + 6u^7 + 10u^6 + 12u^5 + 14u^4 + 12u^3 + 12u^2 + a + 8u + 4,$$
$$u^{10} + u^9 + 4u^8 + 3u^7 + 7u^6 + 4u^5 + 7u^4 + 4u^3 + 4u^2 + u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 48 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.

$I_1^u = \langle 3.54\times10^{25}u^{37} - 4.74\times10^{25}u^{36} + \cdots + 3.48\times10^{25}b - 4.36\times10^{24},\ 2.89\times10^{25}u^{37} - 3.57\times10^{25}u^{36} + \cdots + 3.48\times10^{25}a + 4.30\times10^{24},\ u^{38} - 2u^{37} + \cdots - 3u + 1\rangle$

(i) Arc colorings

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

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

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

$$a_{10} = \begin{pmatrix} -0.828678u^{37} + 1.02565u^{36} + \cdots - 2.81126u - 0.123399 \\ -1.01620u^{37} + 1.36105u^{36} + \cdots - 0.588254u + 0.125257 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.631271u^{37} + 0.581742u^{36} + \cdots - 2.12748u + 3.40130 \\ -0.642147u^{37} + 1.04198u^{36} + \cdots - 0.717938u + 0.0244084 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} 0.607524u^{37} - 0.145250u^{36} + \cdots + 0.310068u + 2.19514 \\ -0.307663u^{37} + 0.666840u^{36} + \cdots - 0.855780u + 0.456085 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.187524u^{37} - 0.335397u^{36} + \cdots - 2.22301u - 0.248656 \\ -1.01620u^{37} + 1.36105u^{36} + \cdots - 0.588254u + 0.125257 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.27334u^{37} + 1.88196u^{36} + \cdots + 0.0209510u - 0.151656 \\ 1.28508u^{37} - 2.98814u^{36} + \cdots + 3.97779u - 1.10711 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0155744u^{37} + 0.751097u^{36} + \cdots - 1.99782u + 0.341364 \\ -1.31911u^{37} + 1.47526u^{36} + \cdots - 3.17447u + 0.821375 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0155744u^{37} + 0.751097u^{36} + \cdots - 1.99782u + 0.341364 \\ -1.31911u^{37} + 1.47526u^{36} + \cdots - 3.17447u + 0.821375 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{1348397540178200313939718 70}{3482669105083354047865547 3}u^{37} + \frac{3307262072424404195903844}{440844190516880259223487}u^{36} + \cdots - \frac{4332677875494884455499363 84}{3482669105083354047865547 3}u + \frac{6149010133761648621230298 30}{3482669105083354047865547 3}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{38} - 2u^{37} + \cdots - 3u + 1$
c_2	$u^{38} + 20u^{37} + \cdots - 7u + 1$
c_3	$u^{38} - u^{37} + \cdots - 130u - 29$
c_4, c_8, c_9	$u^{38} + u^{37} + \cdots - 24u - 19$
c_6, c_{10}	$u^{38} - 3u^{37} + \cdots + 94u - 11$
c_7	$u^{38} + u^{37} + \cdots - 39u - 2$
c_{11}	$u^{38} - 2u^{37} + \cdots + 31u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{38} + 20y^{37} + \cdots - 7y + 1$
c_2	$y^{38} + 4y^{37} + \cdots - 95y + 1$
c_3	$y^{38} + 41y^{37} + \cdots + 1138y + 841$
c_4, c_8, c_9	$y^{38} - 35y^{37} + \cdots - 6y + 361$
c_6, c_{10}	$y^{38} - 17y^{37} + \cdots - 1686y + 121$
c_7	$y^{38} + 37y^{37} + \cdots - 325y + 4$
c_{11}	$y^{38} - 38y^{37} + \cdots - 415y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.198690 + 0.927706I$ $a = -0.29365 - 1.42984I$ $b = -0.507231 - 0.501686I$	$-1.65932 + 1.72508I$	$3.99615 - 5.00557I$
$u = 0.198690 - 0.927706I$ $a = -0.29365 + 1.42984I$ $b = -0.507231 + 0.501686I$	$-1.65932 - 1.72508I$	$3.99615 + 5.00557I$
$u = -0.379743 + 0.859856I$ $a = -0.035838 + 1.400050I$ $b = 0.285476 + 0.554000I$	$1.30138 - 1.64549I$	$4.54049 - 1.93386I$
$u = -0.379743 - 0.859856I$ $a = -0.035838 - 1.400050I$ $b = 0.285476 - 0.554000I$	$1.30138 + 1.64549I$	$4.54049 + 1.93386I$
$u = 0.437061 + 1.002290I$ $a = 0.802004 - 0.659495I$ $b = 1.178350 - 0.751371I$	$-3.43318 + 1.20443I$	$6.92259 - 2.66519I$
$u = 0.437061 - 1.002290I$ $a = 0.802004 + 0.659495I$ $b = 1.178350 + 0.751371I$	$-3.43318 - 1.20443I$	$6.92259 + 2.66519I$
$u = 0.668607 + 0.872893I$ $a = -0.468782 + 0.686829I$ $b = -0.086247 + 0.537690I$	$1.01360 + 2.58424I$	$2.68887 - 3.99949I$
$u = 0.668607 - 0.872893I$ $a = -0.468782 - 0.686829I$ $b = -0.086247 - 0.537690I$	$1.01360 - 2.58424I$	$2.68887 + 3.99949I$
$u = 0.496586 + 1.000340I$ $a = -0.81802 + 1.31551I$ $b = 1.39385 + 0.31403I$	$-3.05076 + 4.70281I$	$7.22690 - 4.71362I$
$u = 0.496586 - 1.000340I$ $a = -0.81802 - 1.31551I$ $b = 1.39385 - 0.31403I$	$-3.05076 - 4.70281I$	$7.22690 + 4.71362I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.081330 + 0.386328I$ $a = -0.216812 - 0.071474I$ $b = 1.43091 - 0.33793I$	$1.95602 - 6.72677I$	$10.60803 + 3.77299I$
$u = 1.081330 - 0.386328I$ $a = -0.216812 + 0.071474I$ $b = 1.43091 + 0.33793I$	$1.95602 + 6.72677I$	$10.60803 - 3.77299I$
$u = -0.775393 + 0.236076I$ $a = -0.744379 - 0.266250I$ $b = -0.299152 - 0.795595I$	$-3.53482 + 2.58667I$	$7.16756 - 2.58418I$
$u = -0.775393 - 0.236076I$ $a = -0.744379 + 0.266250I$ $b = -0.299152 + 0.795595I$	$-3.53482 - 2.58667I$	$7.16756 + 2.58418I$
$u = -0.913408 + 0.776527I$ $a = -0.296533 - 0.156951I$ $b = 1.287170 + 0.114756I$	$5.31271 - 0.53174I$	$10.57597 + 0.24868I$
$u = -0.913408 - 0.776527I$ $a = -0.296533 + 0.156951I$ $b = 1.287170 - 0.114756I$	$5.31271 + 0.53174I$	$10.57597 - 0.24868I$
$u = 0.447680 + 0.663750I$ $a = 0.97208 - 2.47509I$ $b = -1.110300 + 0.132355I$	$-1.90577 - 0.72497I$	$8.59505 - 1.33995I$
$u = 0.447680 - 0.663750I$ $a = 0.97208 + 2.47509I$ $b = -1.110300 - 0.132355I$	$-1.90577 + 0.72497I$	$8.59505 + 1.33995I$
$u = -0.526939 + 1.137220I$ $a = 0.54259 - 1.42286I$ $b = 1.53921 - 0.16530I$	$5.23331 - 4.18634I$	$5.68349 + 3.29449I$
$u = -0.526939 - 1.137220I$ $a = 0.54259 + 1.42286I$ $b = 1.53921 + 0.16530I$	$5.23331 + 4.18634I$	$5.68349 - 3.29449I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.784887 + 0.992111I$ $a = 0.32772 + 1.44641I$ $b = -1.252110 + 0.274462I$	$4.61276 - 5.70694I$	$9.04865 + 6.07255I$
$u = -0.784887 - 0.992111I$ $a = 0.32772 - 1.44641I$ $b = -1.252110 - 0.274462I$	$4.61276 + 5.70694I$	$9.04865 - 6.07255I$
$u = -0.561660 + 1.148650I$ $a = -0.34487 - 1.38992I$ $b = 0.258106 - 1.087690I$	$-6.14363 - 7.57123I$	$4.89087 + 5.76194I$
$u = -0.561660 - 1.148650I$ $a = -0.34487 + 1.38992I$ $b = 0.258106 + 1.087690I$	$-6.14363 + 7.57123I$	$4.89087 - 5.76194I$
$u = -0.297248 + 1.257890I$ $a = 0.693796 + 0.789863I$ $b = -0.164859 + 0.672738I$	$-8.06788 - 1.04561I$	$1.73854 + 0.76531I$
$u = -0.297248 - 1.257890I$ $a = 0.693796 - 0.789863I$ $b = -0.164859 - 0.672738I$	$-8.06788 + 1.04561I$	$1.73854 - 0.76531I$
$u = 0.693371$ $a = -0.324535$ $b = -1.38702$	7.32047	11.7760
$u = 0.534109 + 1.201300I$ $a = 0.76686 + 1.35110I$ $b = 1.196420 + 0.245037I$	$4.11680 + 4.64818I$	$7.00000 - 4.11714I$
$u = 0.534109 - 1.201300I$ $a = 0.76686 - 1.35110I$ $b = 1.196420 - 0.245037I$	$4.11680 - 4.64818I$	$7.00000 + 4.11714I$
$u = 0.326007 + 0.583311I$ $a = -0.52323 - 2.59696I$ $b = -0.878482 - 0.628167I$	$-2.08165 + 2.22554I$	$9.62442 - 6.36612I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.326007 - 0.583311I$ $a = -0.52323 + 2.59696I$ $b = -0.878482 + 0.628167I$	$-2.08165 - 2.22554I$	$9.62442 + 6.36612I$
$u = 0.698047 + 1.223380I$ $a = -0.14107 - 1.57898I$ $b = -1.47736 - 0.45823I$	$-0.64182 + 13.08690I$	0
$u = 0.698047 - 1.223380I$ $a = -0.14107 + 1.57898I$ $b = -1.47736 + 0.45823I$	$-0.64182 - 13.08690I$	0
$u = 0.19948 + 1.53203I$ $a = -0.874606 + 0.019930I$ $b = -1.233390 + 0.241654I$	$-4.80130 - 2.15880I$	0
$u = 0.19948 - 1.53203I$ $a = -0.874606 - 0.019930I$ $b = -1.233390 - 0.241654I$	$-4.80130 + 2.15880I$	0
$u = -0.337441 + 0.249883I$ $a = 1.16350 + 0.97340I$ $b = -1.59455 + 0.00504I$	$7.79085 - 0.03851I$	$8.05729 - 1.80582I$
$u = -0.337441 - 0.249883I$ $a = 1.16350 - 0.97340I$ $b = -1.59455 - 0.00504I$	$7.79085 + 0.03851I$	$8.05729 + 1.80582I$
$u = 0.284870$ $a = -0.696967$ $b = 0.455407$	0.644934	15.5790

II.

$$\boldsymbol{I_2^u = \langle -u^9 - 3u^7 + \cdots + b + 1,\ u^9 + 3u^8 + \cdots + a + 4,\ u^{10} + u^9 + \cdots + u + 1 \rangle}$$

(i) Arc colorings

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

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

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

$$a_{10} = \begin{pmatrix} -u^9 - 3u^8 - 6u^7 - 10u^6 - 12u^5 - 14u^4 - 12u^3 - 12u^2 - 8u - 4 \\ u^9 + 3u^7 - u^6 + 4u^5 - 2u^4 + 3u^3 - u^2 - 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2u^9 + u^8 + 6u^7 + u^6 + 8u^5 - u^4 + 6u^3 + u - 2 \\ u^8 + 3u^6 + 4u^4 + 2u^2 + u \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} u^9 + 3u^7 - u^6 + 4u^5 - 3u^4 + 3u^3 - 2u^2 - 2 \\ u^8 + 3u^6 + 4u^4 + 3u^2 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -2u^9 - 3u^8 - 9u^7 - 9u^6 - 16u^5 - 12u^4 - 15u^3 - 11u^2 - 8u - 3 \\ u^9 + 3u^7 - u^6 + 4u^5 - 2u^4 + 3u^3 - u^2 - 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^9 + 3u^8 + 5u^7 + 9u^6 + 9u^5 + 12u^4 + 8u^3 + 10u^2 + 6u + 2 \\ u^9 + u^8 + 4u^7 + 3u^6 + 7u^5 + 4u^4 + 7u^3 + 4u^2 + 3u + 2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -2u^9 - 5u^8 - 10u^7 - 16u^6 - 18u^5 - 22u^4 - 17u^3 - 19u^2 - 12u - 5 \\ -u^7 - u^6 - 3u^5 - 2u^4 - 3u^3 - 2u^2 - 2u - 2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -2u^9 - 5u^8 - 10u^7 - 16u^6 - 18u^5 - 22u^4 - 17u^3 - 19u^2 - 12u - 5 \\ -u^7 - u^6 - 3u^5 - 2u^4 - 3u^3 - 2u^2 - 2u - 2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 6u^9 + u^8 + 19u^7 - u^6 + 26u^5 - 10u^4 + 20u^3 - 9u^2 + 2u$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{10} - u^9 + 4u^8 - 3u^7 + 7u^6 - 4u^5 + 7u^4 - 4u^3 + 4u^2 - u + 1$
c_2	$u^{10} + 7u^9 + \cdots + 7u + 1$
c_3	$u^{10} + 2u^8 + u^7 - 4u^6 - 2u^5 - 2u^4 - 2u^3 + 8u^2 - 2u + 1$
c_4	$u^{10} - 6u^8 - u^7 + 13u^6 + 4u^5 - 12u^4 - 5u^3 + 4u^2 + 2u + 1$
c_5	$u^{10} + u^9 + 4u^8 + 3u^7 + 7u^6 + 4u^5 + 7u^4 + 4u^3 + 4u^2 + u + 1$
c_6	$u^{10} - 2u^9 - u^8 + 3u^7 + u^5 - 2u^4 - 2u^3 + 2u^2 + 1$
c_7	$u^{10} + 2u^8 - 2u^7 - 2u^6 + u^5 + 3u^3 - u^2 - 2u + 1$
c_8, c_9	$u^{10} - 6u^8 + u^7 + 13u^6 - 4u^5 - 12u^4 + 5u^3 + 4u^2 - 2u + 1$
c_{10}	$u^{10} + 2u^9 - u^8 - 3u^7 - u^5 - 2u^4 + 2u^3 + 2u^2 + 1$
c_{11}	$u^{10} - 3u^9 + u^8 + 5u^7 - 7u^6 + 3u^5 + 4u^4 - 7u^3 + 6u^2 - 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{10} + 7y^9 + \cdots + 7y + 1$
c_2	$y^{10} - y^9 + \cdots - 5y + 1$
c_3	$y^{10} + 4y^9 + \cdots + 12y + 1$
c_4, c_8, c_9	$y^{10} - 12y^9 + \cdots + 4y + 1$
c_6, c_{10}	$y^{10} - 6y^9 + 13y^8 - 9y^7 - 6y^6 + 9y^5 + 6y^4 - 12y^3 + 4y + 1$
c_7	$y^{10} + 4y^9 - 12y^7 + 6y^6 + 9y^5 - 6y^4 - 9y^3 + 13y^2 - 6y + 1$
c_{11}	$y^{10} - 7y^9 + 17y^8 - 13y^7 - 3y^6 + y^5 + 6y^4 + 3y^3 + 2y^2 + 3y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.591573 + 0.895458I$ $a = -0.062941 + 0.916484I$ $b = -0.162645 + 0.362811I$	$1.88316 + 2.32533I$	$12.32535 - 3.44072I$
$u = 0.591573 - 0.895458I$ $a = -0.062941 - 0.916484I$ $b = -0.162645 - 0.362811I$	$1.88316 - 2.32533I$	$12.32535 + 3.44072I$
$u = -0.587969 + 0.580983I$ $a = -0.270490 - 0.170382I$ $b = 1.56713 + 0.08593I$	$8.26505 - 0.63915I$	$14.5970 + 5.3987I$
$u = -0.587969 - 0.580983I$ $a = -0.270490 + 0.170382I$ $b = 1.56713 - 0.08593I$	$8.26505 + 0.63915I$	$14.5970 - 5.3987I$
$u = -0.642090 + 1.139230I$ $a = -0.42175 + 1.41771I$ $b = -1.43000 + 0.16541I$	$6.43677 - 4.34705I$	$13.62063 + 3.59101I$
$u = -0.642090 - 1.139230I$ $a = -0.42175 - 1.41771I$ $b = -1.43000 - 0.16541I$	$6.43677 + 4.34705I$	$13.62063 - 3.59101I$
$u = 0.059179 + 1.329340I$ $a = 0.597845 + 0.216685I$ $b = 0.995882 - 0.290486I$	$-5.58838 - 1.13850I$	$4.94587 - 0.33361I$
$u = 0.059179 - 1.329340I$ $a = 0.597845 - 0.216685I$ $b = 0.995882 + 0.290486I$	$-5.58838 + 1.13850I$	$4.94587 + 0.33361I$
$u = 0.079307 + 0.642927I$ $a = -0.84267 - 3.52089I$ $b = -0.970365 - 0.458151I$	$-2.77192 + 1.74853I$	$1.51113 - 2.06464I$
$u = 0.079307 - 0.642927I$ $a = -0.84267 + 3.52089I$ $b = -0.970365 + 0.458151I$	$-2.77192 - 1.74853I$	$1.51113 + 2.06464I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{10} - u^9 + 4u^8 - 3u^7 + 7u^6 - 4u^5 + 7u^4 - 4u^3 + 4u^2 - u + 1)$ $\cdot (u^{38} - 2u^{37} + \cdots - 3u + 1)$
c_2	$(u^{10} + 7u^9 + \cdots + 7u + 1)(u^{38} + 20u^{37} + \cdots - 7u + 1)$
c_3	$(u^{10} + 2u^8 + u^7 - 4u^6 - 2u^5 - 2u^4 - 2u^3 + 8u^2 - 2u + 1)$ $\cdot (u^{38} - u^{37} + \cdots - 130u - 29)$
c_4	$(u^{10} - 6u^8 - u^7 + 13u^6 + 4u^5 - 12u^4 - 5u^3 + 4u^2 + 2u + 1)$ $\cdot (u^{38} + u^{37} + \cdots - 24u - 19)$
c_5	$(u^{10} + u^9 + 4u^8 + 3u^7 + 7u^6 + 4u^5 + 7u^4 + 4u^3 + 4u^2 + u + 1)$ $\cdot (u^{38} - 2u^{37} + \cdots - 3u + 1)$
c_6	$(u^{10} - 2u^9 - u^8 + 3u^7 + u^5 - 2u^4 - 2u^3 + 2u^2 + 1)$ $\cdot (u^{38} - 3u^{37} + \cdots + 94u - 11)$
c_7	$(u^{10} + 2u^8 - 2u^7 - 2u^6 + u^5 + 3u^3 - u^2 - 2u + 1)$ $\cdot (u^{38} + u^{37} + \cdots - 39u - 2)$
c_8, c_9	$(u^{10} - 6u^8 + u^7 + 13u^6 - 4u^5 - 12u^4 + 5u^3 + 4u^2 - 2u + 1)$ $\cdot (u^{38} + u^{37} + \cdots - 24u - 19)$
c_{10}	$(u^{10} + 2u^9 - u^8 - 3u^7 - u^5 - 2u^4 + 2u^3 + 2u^2 + 1)$ $\cdot (u^{38} - 3u^{37} + \cdots + 94u - 11)$
c_{11}	$(u^{10} - 3u^9 + u^8 + 5u^7 - 7u^6 + 3u^5 + 4u^4 - 7u^3 + 6u^2 - 3u + 1)$ $\cdot (u^{38} - 2u^{37} + \cdots + 31u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{10} + 7y^9 + \cdots + 7y + 1)(y^{38} + 20y^{37} + \cdots - 7y + 1)$
c_2	$(y^{10} - y^9 + \cdots - 5y + 1)(y^{38} + 4y^{37} + \cdots - 95y + 1)$
c_3	$(y^{10} + 4y^9 + \cdots + 12y + 1)(y^{38} + 41y^{37} + \cdots + 1138y + 841)$
c_4, c_8, c_9	$(y^{10} - 12y^9 + \cdots + 4y + 1)(y^{38} - 35y^{37} + \cdots - 6y + 361)$
c_6, c_{10}	$(y^{10} - 6y^9 + 13y^8 - 9y^7 - 6y^6 + 9y^5 + 6y^4 - 12y^3 + 4y + 1)$ $\cdot (y^{38} - 17y^{37} + \cdots - 1686y + 121)$
c_7	$(y^{10} + 4y^9 - 12y^7 + 6y^6 + 9y^5 - 6y^4 - 9y^3 + 13y^2 - 6y + 1)$ $\cdot (y^{38} + 37y^{37} + \cdots - 325y + 4)$
c_{11}	$(y^{10} - 7y^9 + 17y^8 - 13y^7 - 3y^6 + y^5 + 6y^4 + 3y^3 + 2y^2 + 3y + 1)$ $\cdot (y^{38} - 38y^{37} + \cdots - 415y + 1)$