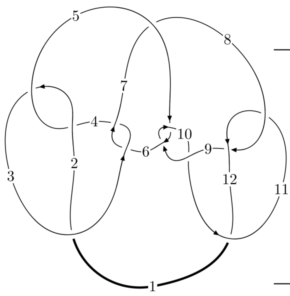
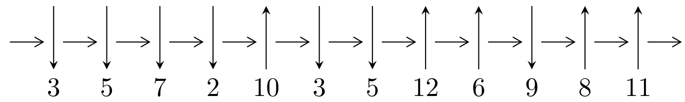
$12n_{0071}$ ($K12n_{0071}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I^u_1 = \langle -1.70615 \times 10^{34} u^{39} + 1.06745 \times 10^{33} u^{38} + \cdots + 5.47651 \times 10^{34} b + 1.26128 \times 10^{35},$$
$$- 1.54680 \times 10^{35} u^{39} + 2.39864 \times 10^{35} u^{38} + \cdots + 1.09530 \times 10^{35} a - 4.53620 \times 10^{35},\ u^{40} - 2u^{39} + \cdots + 4u -$$
$$I^u_2 = \langle b + 1,\ -u^8 + 2u^7 - 3u^6 + 3u^5 - 4u^4 + 4u^3 - 3u^2 + a + 2u - 1,\ u^9 - u^8 + 2u^7 - u^6 + 3u^5 - u^4 + 2u^3 + u +$$

$$I^v_1 = \langle a,\ b + v - 2,\ v^2 - 3v + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 51 representations.

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[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.

$$\boldsymbol{I_1^u = \langle -1.71\times10^{34}u^{39}+1.07\times10^{33}u^{38}+\cdots+5.48\times10^{34}b+1.26\times10^{35},\ -1.55\times10^{35}u^{39}+2.40\times10^{35}u^{38}+\cdots+1.10\times10^{35}a-4.54\times10^{35},\ u^{40}-2u^{39}+\cdots+4u-4\rangle}$$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix}1.41222u^{39} - 2.18994u^{38} + \cdots - 11.0073u + 4.14151\\0.311540u^{39} - 0.0194914u^{38} + \cdots - 2.46184u - 2.30307\end{pmatrix}$$

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

$$a_7 = \begin{pmatrix}1.29467u^{39} - 2.32830u^{38} + \cdots - 7.27281u + 5.25464\\0.739952u^{39} - 0.868974u^{38} + \cdots - 6.01405u - 0.199281\end{pmatrix}$$

$$a_8 = \begin{pmatrix}0.554717u^{39} - 1.45933u^{38} + \cdots - 1.25876u + 5.45392\\0.739952u^{39} - 0.868974u^{38} + \cdots - 6.01405u - 0.199281\end{pmatrix}$$

$$a_2 = \begin{pmatrix}1.72376u^{39} - 2.20943u^{38} + \cdots - 13.4692u + 1.83844\\0.311540u^{39} - 0.0194914u^{38} + \cdots - 2.46184u - 2.30307\end{pmatrix}$$

$$a_1 = \begin{pmatrix}1.29467u^{39} - 2.32830u^{38} + \cdots - 7.27281u + 5.25464\\-0.230688u^{39} + 0.321263u^{38} + \cdots + 1.87952u - 0.844865\end{pmatrix}$$

$$a_4 = \begin{pmatrix}0.544195u^{39} - 0.801448u^{38} + \cdots - 5.22381u + 0.269369\\-0.448480u^{39} + 0.683873u^{38} + \cdots + 4.04346u - 1.80083\end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix}-u^3\\u^5 + u^3 + u\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}1.23672u^{39} - 2.44708u^{38} + \cdots - 6.97510u + 6.29059\\-0.392051u^{39} + 0.485888u^{38} + \cdots + 3.56359u - 0.624191\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.979451u^{39} - 1.42354u^{38} + \cdots + 1.47042u - 2.27161$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{40} + 57u^{39} + \cdots + 351u + 1$
c_2, c_4	$u^{40} - 11u^{39} + \cdots + 9u + 1$
c_3, c_6	$u^{40} + 2u^{39} + \cdots + 512u - 512$
c_5, c_9	$u^{40} - 2u^{39} + \cdots + 4u - 4$
c_7	$u^{40} - 3u^{39} + \cdots + u - 1$
c_8, c_{11}	$u^{40} + 4u^{39} + \cdots - 6u + 1$
c_{10}	$u^{40} + 18u^{39} + \cdots - 104u + 16$
c_{12}	$u^{40} - 20u^{39} + \cdots - 94u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{40} - 137y^{39} + \cdots - 102695y + 1$
c_2, c_4	$y^{40} - 57y^{39} + \cdots - 351y + 1$
c_3, c_6	$y^{40} - 60y^{39} + \cdots - 3407872y + 262144$
c_5, c_9	$y^{40} + 18y^{39} + \cdots - 104y + 16$
c_7	$y^{40} - 85y^{39} + \cdots - 31y + 1$
c_8, c_{11}	$y^{40} - 20y^{39} + \cdots - 94y + 1$
c_{10}	$y^{40} + 6y^{39} + \cdots - 26912y + 256$
c_{12}	$y^{40} + 4y^{39} + \cdots - 7630y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.767555 + 0.682797I$ $a = 0.527466 - 0.374649I$ $b = 0.351491 + 0.041737I$	$3.81537 + 1.27262I$	$6.29824 - 0.66128I$
$u = -0.767555 - 0.682797I$ $a = 0.527466 + 0.374649I$ $b = 0.351491 - 0.041737I$	$3.81537 - 1.27262I$	$6.29824 + 0.66128I$
$u = 0.873000 + 0.401971I$ $a = 0.540073 + 0.763124I$ $b = -0.870382 - 0.585645I$	$0.09726 - 2.75203I$	$-2.88480 + 4.23304I$
$u = 0.873000 - 0.401971I$ $a = 0.540073 - 0.763124I$ $b = -0.870382 + 0.585645I$	$0.09726 + 2.75203I$	$-2.88480 - 4.23304I$
$u = 0.552365 + 0.888486I$ $a = 0.518410 + 0.192533I$ $b = 0.342558 + 0.168348I$	$0.08572 + 2.19817I$	$0.38918 - 2.62021I$
$u = 0.552365 - 0.888486I$ $a = 0.518410 - 0.192533I$ $b = 0.342558 - 0.168348I$	$0.08572 - 2.19817I$	$0.38918 + 2.62021I$
$u = -0.027732 + 0.938035I$ $a = 0.600853 - 0.094307I$ $b = -0.017454 + 0.471847I$	$-1.55152 + 1.36538I$	$-4.32744 - 4.03663I$
$u = -0.027732 - 0.938035I$ $a = 0.600853 + 0.094307I$ $b = -0.017454 - 0.471847I$	$-1.55152 - 1.36538I$	$-4.32744 + 4.03663I$
$u = 0.431539 + 0.988175I$ $a = 0.546146 + 0.283746I$ $b = -0.284057 - 0.713228I$	$-0.42853 + 2.82368I$	$-2.74140 - 3.00000I$
$u = 0.431539 - 0.988175I$ $a = 0.546146 - 0.283746I$ $b = -0.284057 + 0.713228I$	$-0.42853 - 2.82368I$	$-2.74140 + 3.00000I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.079360 + 0.315602I$ $a = 0.188664 + 0.002235I$ $b = 1.79704 - 0.10786I$	$-11.27530 + 1.20929I$	$-5.80586 + 0.92387I$
$u = -1.079360 - 0.315602I$ $a = 0.188664 - 0.002235I$ $b = 1.79704 + 0.10786I$	$-11.27530 - 1.20929I$	$-5.80586 - 0.92387I$
$u = 0.216652 + 1.135450I$ $a = -1.66179 - 0.18633I$ $b = -1.318890 - 0.413598I$	$-5.01603 - 0.16820I$	$-8.63543 + 0.05327I$
$u = 0.216652 - 1.135450I$ $a = -1.66179 + 0.18633I$ $b = -1.318890 + 0.413598I$	$-5.01603 + 0.16820I$	$-8.63543 - 0.05327I$
$u = 0.481478 + 1.060550I$ $a = 2.09296 + 1.81237I$ $b = 1.77358 - 0.16425I$	$-8.56336 + 3.34791I$	$-4.12753 - 2.29966I$
$u = 0.481478 - 1.060550I$ $a = 2.09296 - 1.81237I$ $b = 1.77358 + 0.16425I$	$-8.56336 - 3.34791I$	$-4.12753 + 2.29966I$
$u = -0.389413 + 1.130570I$ $a = -1.39760 + 0.84641I$ $b = -1.016230 - 0.711563I$	$-4.30445 - 2.98930I$	$-8.10205 + 2.51738I$
$u = -0.389413 - 1.130570I$ $a = -1.39760 - 0.84641I$ $b = -1.016230 + 0.711563I$	$-4.30445 + 2.98930I$	$-8.10205 - 2.51738I$
$u = -0.697362 + 1.004410I$ $a = 0.423595 - 0.213085I$ $b = 0.479221 - 0.154409I$	$2.84493 - 6.83482I$	$4.23533 + 5.20206I$
$u = -0.697362 - 1.004410I$ $a = 0.423595 + 0.213085I$ $b = 0.479221 + 0.154409I$	$2.84493 + 6.83482I$	$4.23533 - 5.20206I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.496749+1.146130I$ $a=-1.36151+0.53213I$ $b=-1.45579+0.29115I$	$-3.51298-4.94394I$	$-5.28672+5.25390I$
$u=-0.496749-1.146130I$ $a=-1.36151-0.53213I$ $b=-1.45579-0.29115I$	$-3.51298+4.94394I$	$-5.28672-5.25390I$
$u=\ 1.125440+0.571611I$ $a=\ 0.189635-0.004384I$ $b=\ 1.78560+0.20613I$	$-9.38333-6.25287I$	$-3.71429+3.55273I$
$u=\ 1.125440-0.571611I$ $a=\ 0.189635+0.004384I$ $b=\ 1.78560-0.20613I$	$-9.38333+6.25287I$	$-3.71429-3.55273I$
$u=-0.711358+0.187576I$ $a=\ 0.28261+1.89131I$ $b=-1.119340-0.213535I$	$-0.733261+0.420305I$	$-2.53134-5.06503I$
$u=-0.711358-0.187576I$ $a=\ 0.28261-1.89131I$ $b=-1.119340+0.213535I$	$-0.733261-0.420305I$	$-2.53134+5.06503I$
$u=\ 0.452397+0.566444I$ $a=\ 0.191549-0.000487I$ $b=\ 1.59905+0.08829I$	$-6.90633+0.62272I$	$-3.96477-7.65597I$
$u=\ 0.452397-0.566444I$ $a=\ 0.191549+0.000487I$ $b=\ 1.59905-0.08829I$	$-6.90633-0.62272I$	$-3.96477+7.65597I$
$u=\ 0.344447+0.623097I$ $a=-2.15466-2.41727I$ $b=-0.764103+0.413686I$	$0.797208+0.661473I$	$-4.69435-5.79725I$
$u=\ 0.344447-0.623097I$ $a=-2.15466+2.41727I$ $b=-0.764103-0.413686I$	$0.797208-0.661473I$	$-4.69435+5.79725I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.608559 + 1.157670I$ $a = -1.08482 - 0.95472I$ $b = -0.923559 + 0.844828I$	$-2.24385 + 8.24833I$	$-4.49922 - 6.95806I$
$u = 0.608559 - 1.157670I$ $a = -1.08482 + 0.95472I$ $b = -0.923559 - 0.844828I$	$-2.24385 - 8.24833I$	$-4.49922 + 6.95806I$
$u = -0.640898 + 1.241650I$ $a = 1.47950 - 1.37909I$ $b = 1.82246 + 0.25034I$	$-14.2021 - 7.3246I$	$-7.52732 + 3.21849I$
$u = -0.640898 - 1.241650I$ $a = 1.47950 + 1.37909I$ $b = 1.82246 - 0.25034I$	$-14.2021 + 7.3246I$	$-7.52732 - 3.21849I$
$u = -0.11613 + 1.42102I$ $a = 2.07367 - 0.26407I$ $b = 1.93738 + 0.04804I$	$-17.7940 - 3.0498I$	$-8.36562 + 2.61097I$
$u = -0.11613 - 1.42102I$ $a = 2.07367 + 0.26407I$ $b = 1.93738 - 0.04804I$	$-17.7940 + 3.0498I$	$-8.36562 - 2.61097I$
$u = 0.77397 + 1.20805I$ $a = 1.18273 + 1.46175I$ $b = 1.78706 - 0.30179I$	$-11.4479 + 13.0879I$	$0. - 6.81590I$
$u = 0.77397 - 1.20805I$ $a = 1.18273 - 1.46175I$ $b = 1.78706 + 0.30179I$	$-11.4479 - 13.0879I$	$0. + 6.81590I$
$u = 0.458630$ $a = 1.38775$ $b = -0.0558807$	1.26099	8.96990
$u = -0.325204$ $a = 1.75723$ $b = -0.755372$	-1.11358	-9.07280

II.

$$\boldsymbol{I_2^u = \langle b+1,\ -u^8+2u^7+\cdots+a-1,\ u^9-u^8+2u^7-u^6+3u^5-u^4+2u^3+u+1\rangle}$$

(i) Arc colorings

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

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

$$a_3 = \begin{pmatrix}u^8-2u^7+3u^6-3u^5+4u^4-4u^3+3u^2-2u+1\\-1\end{pmatrix}$$

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

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

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

$$a_2 = \begin{pmatrix}u^8-2u^7+3u^6-3u^5+4u^4-4u^3+3u^2-2u\\-1\end{pmatrix}$$

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

$$a_4 = \begin{pmatrix}u^8-2u^7+3u^6-3u^5+4u^4-4u^3+3u^2-2u+1\\-1\end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix}-u^3\\u^5+u^3+u\end{pmatrix}$$

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 3u^8-8u^7+12u^6-11u^5+18u^4-17u^3+15u^2-6u+4$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^9$
c_3, c_6	u^9
c_4	$(u+1)^9$
c_5	$u^9 - u^8 + 2u^7 - u^6 + 3u^5 - u^4 + 2u^3 + u + 1$
c_7, c_{10}	$u^9 + 3u^8 + 8u^7 + 13u^6 + 17u^5 + 17u^4 + 12u^3 + 6u^2 + u - 1$
c_8	$u^9 - u^8 - 2u^7 + 3u^6 + u^5 - 3u^4 + 2u^3 - u + 1$
c_9	$u^9 + u^8 + 2u^7 + u^6 + 3u^5 + u^4 + 2u^3 + u - 1$
c_{11}	$u^9 + u^8 - 2u^7 - 3u^6 + u^5 + 3u^4 + 2u^3 - u - 1$
c_{12}	$u^9 - 5u^8 + 12u^7 - 15u^6 + 9u^5 + u^4 - 4u^3 + 2u^2 + u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^9$
c_3, c_6	y^9
c_5, c_9	$y^9+3y^8+8y^7+13y^6+17y^5+17y^4+12y^3+6y^2+y-1$
c_7, c_{10}	$y^9+7y^8+20y^7+25y^6+5y^5-15y^4+22y^2+13y-1$
c_8, c_{11}	$y^9-5y^8+12y^7-15y^6+9y^5+y^4-4y^3+2y^2+y-1$
c_{12}	$y^9-y^8+12y^7-7y^6+37y^5+y^4-10y^2+5y-1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.140343 + 0.966856I$ $a = -1.004430 + 0.297869I$ $b = -1.00000$	$-3.42837 - 2.09337I$	$-6.83106 + 4.06115I$
$u = -0.140343 - 0.966856I$ $a = -1.004430 - 0.297869I$ $b = -1.00000$	$-3.42837 + 2.09337I$	$-6.83106 - 4.06115I$
$u = -0.628449 + 0.875112I$ $a = -0.275254 + 0.816341I$ $b = -1.00000$	$-1.02799 - 2.45442I$	$-7.33502 + 3.27944I$
$u = -0.628449 - 0.875112I$ $a = -0.275254 - 0.816341I$ $b = -1.00000$	$-1.02799 + 2.45442I$	$-7.33502 - 3.27944I$
$u = 0.796005 + 0.733148I$ $a = 0.070080 - 0.850995I$ $b = -1.00000$	$2.72642 - 1.33617I$	$-2.78826 + 0.80685I$
$u = 0.796005 - 0.733148I$ $a = 0.070080 + 0.850995I$ $b = -1.00000$	$2.72642 + 1.33617I$	$-2.78826 - 0.80685I$
$u = 0.728966 + 0.986295I$ $a = -0.195086 - 0.635552I$ $b = -1.00000$	$1.95319 + 7.08493I$	$-4.66194 - 6.93476I$
$u = 0.728966 - 0.986295I$ $a = -0.195086 + 0.635552I$ $b = -1.00000$	$1.95319 - 7.08493I$	$-4.66194 + 6.93476I$
$u = -0.512358$ $a = 3.80937$ $b = -1.00000$	-0.446489	15.2330

III. $I_1^v = \langle a,\ b + v - 2,\ v^2 - 3v + 1\rangle$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -9$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^2 - 7y + 1$
c_2, c_3, c_4 c_6	$y^2 - 3y + 1$
c_5, c_9, c_{10}	y^2
c_8, c_{11}, c_{12}	$(y-1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$v=$ 0.381966 $a=$ 0 $b=$ 1.61803	−7.23771	−9.00000
$v=$ 2.61803 $a=$ 0 $b=$ −0.618034	0.657974	−9.00000

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^9)(u^2-3u+1)(u^{40}+57u^{39}+\cdots+351u+1)$
c_2	$((u-1)^9)(u^2+u-1)(u^{40}-11u^{39}+\cdots+9u+1)$
c_3	$u^9(u^2+u-1)(u^{40}+2u^{39}+\cdots+512u-512)$
c_4	$((u+1)^9)(u^2-u-1)(u^{40}-11u^{39}+\cdots+9u+1)$
c_5	$u^2(u^9-u^8+\cdots+u+1)(u^{40}-2u^{39}+\cdots+4u-4)$
c_6	$u^9(u^2-u-1)(u^{40}+2u^{39}+\cdots+512u-512)$
c_7	$(u^2+3u+1)(u^9+3u^8+\cdots+u-1)$ $\cdot(u^{40}-3u^{39}+\cdots+u-1)$
c_8	$(u+1)^2(u^9-u^8-2u^7+3u^6+u^5-3u^4+2u^3-u+1)$ $\cdot(u^{40}+4u^{39}+\cdots-6u+1)$
c_9	$u^2(u^9+u^8+\cdots+u-1)(u^{40}-2u^{39}+\cdots+4u-4)$
c_{10}	$u^2(u^9+3u^8+8u^7+13u^6+17u^5+17u^4+12u^3+6u^2+u-1)$ $\cdot(u^{40}+18u^{39}+\cdots-104u+16)$
c_{11}	$(u-1)^2(u^9+u^8-2u^7-3u^6+u^5+3u^4+2u^3-u-1)$ $\cdot(u^{40}+4u^{39}+\cdots-6u+1)$
c_{12}	$(u-1)^2(u^9-5u^8+12u^7-15u^6+9u^5+u^4-4u^3+2u^2+u-1)$ $\cdot(u^{40}-20u^{39}+\cdots-94u+1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^9)(y^2-7y+1)(y^{40}-137y^{39}+\cdots-102695y+1)$
c_2, c_4	$((y-1)^9)(y^2-3y+1)(y^{40}-57y^{39}+\cdots-351y+1)$
c_3, c_6	$y^9(y^2-3y+1)(y^{40}-60y^{39}+\cdots-3407872y+262144)$
c_5, c_9	$y^2(y^9+3y^8+8y^7+13y^6+17y^5+17y^4+12y^3+6y^2+y-1)$ $\cdot(y^{40}+18y^{39}+\cdots-104y+16)$
c_7	$(y^2-7y+1)(y^9+7y^8+\cdots+13y-1)$ $\cdot(y^{40}-85y^{39}+\cdots-31y+1)$
c_8, c_{11}	$(y-1)^2(y^9-5y^8+12y^7-15y^6+9y^5+y^4-4y^3+2y^2+y-1)$ $\cdot(y^{40}-20y^{39}+\cdots-94y+1)$
c_{10}	$y^2(y^9+7y^8+20y^7+25y^6+5y^5-15y^4+22y^2+13y-1)$ $\cdot(y^{40}+6y^{39}+\cdots-26912y+256)$
c_{12}	$(y-1)^2(y^9-y^8+12y^7-7y^6+37y^5+y^4-10y^2+5y-1)$ $\cdot(y^{40}+4y^{39}+\cdots-7630y+1)$