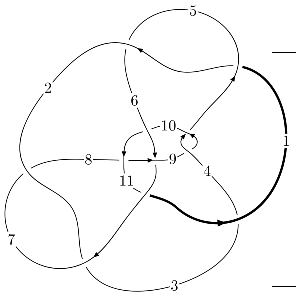
$11n_{166}$ ($K11n_{166}$)



A knot diagram[1]

Linearized knot diagam

$$\to \underset{5}{\downarrow} \to \underset{7}{\downarrow} \to \underset{1}{\downarrow} \to \underset{10}{\uparrow} \to \underset{2}{\downarrow} \to \underset{9}{\uparrow} \to \underset{2}{\downarrow} \to \underset{11}{\downarrow} \to \underset{4}{\uparrow} \to \underset{6}{\uparrow} \to \underset{7}{\downarrow} \to$$

Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle & 1.30687 \times 10^{68} u^{41} - 1.54062 \times 10^{68} u^{40} + \cdots + 9.86366 \times 10^{67} b + 1.76058 \times 10^{68}, \\
& - 2.28329 \times 10^{67} u^{41} - 9.73388 \times 10^{67} u^{40} + \cdots + 9.86366 \times 10^{67} a + 5.08435 \times 10^{68}, \\
& u^{42} - 2u^{41} + \cdots - 12u - 1 \rangle \\
I_2^u = \langle & -33u^{12} - 73u^{11} + \cdots + 23b - 41,\ -242u^{12} - 589u^{11} + \cdots + 23a - 362, \\
& u^{13} + 3u^{12} + 2u^{11} - 3u^{10} - 9u^9 - 9u^8 + 5u^7 + 18u^6 + 7u^5 - 9u^4 - 9u^3 + 3u + 1 \rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 55 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. $\boldsymbol{I_1^u = \langle 1.31 \times 10^{68} u^{41} - 1.54 \times 10^{68} u^{40} + \cdots + 9.86 \times 10^{67} b + 1.76 \times 10^{68},\ -2.28 \times 10^{67} u^{41} - 9.73 \times 10^{67} u^{40} + \cdots + 9.86 \times 10^{67} a + 5.08 \times 10^{68},\ u^{42} - 2u^{41} + \cdots - 12u - 1 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.231485u^{41} + 0.986842u^{40} + \cdots + 194.921u - 5.15463 \\ -1.32493u^{41} + 1.56192u^{40} + \cdots - 20.7796u - 1.78491 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 5.28014u^{41} - 6.60175u^{40} + \cdots + 194.483u + 34.5032 \\ -0.411012u^{41} + 0.388919u^{40} + \cdots - 0.134181u - 0.550999 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 2.74943u^{41} - 1.78847u^{40} + \cdots + 233.329u - 1.91990 \\ 0.549437u^{41} - 0.604447u^{40} + \cdots + 8.86516u + 0.475658 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -3.86650u^{41} + 4.37940u^{40} + \cdots - 154.682u - 24.8689 \\ -1.84296u^{41} + 2.51664u^{40} + \cdots - 43.9754u - 2.80259 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -10.3413u^{41} + 13.9461u^{40} + \cdots - 201.572u - 32.5039 \\ 7.39043u^{41} - 10.4148u^{40} + \cdots + 159.817u + 12.0772 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -2.07285u^{41} + 1.91194u^{40} + \cdots - 116.180u - 21.9484 \\ -2.88801u^{41} + 4.05483u^{40} + \cdots - 67.2450u - 4.60324 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 5.69115u^{41} - 6.99067u^{40} + \cdots + 194.617u + 35.0542 \\ -0.411012u^{41} + 0.388919u^{40} + \cdots - 0.134181u - 0.550999 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 5.69115u^{41} - 6.99067u^{40} + \cdots + 194.617u + 35.0542 \\ -0.411012u^{41} + 0.388919u^{40} + \cdots - 0.134181u - 0.550999 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 29.0951u^{41} - 41.2441u^{40} + \cdots + 827.490u + 68.4277$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{42} + 2u^{41} + \cdots + 12u - 1$
c_2, c_7	$u^{42} + u^{41} + \cdots + 29u + 151$
c_3	$u^{42} - 3u^{41} + \cdots + 75u + 19$
c_4, c_9	$u^{42} + 3u^{41} + \cdots + 21u + 13$
c_6	$u^{42} + 6u^{41} + \cdots + 15u + 1$
c_8	$u^{42} - 6u^{41} + \cdots - 87352u + 17077$
c_{10}	$u^{42} - 2u^{41} + \cdots - 423u - 43$
c_{11}	$u^{42} + u^{41} + \cdots + 2205u + 297$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{42} - 30y^{41} + \cdots - 44y + 1$
c_2, c_7	$y^{42} - 57y^{41} + \cdots - 202275y + 22801$
c_3	$y^{42} - 61y^{41} + \cdots - 7753y + 361$
c_4, c_9	$y^{42} - 25y^{41} + \cdots - 2261y + 169$
c_6	$y^{42} - 2y^{41} + \cdots - 9y + 1$
c_8	$y^{42} - 58y^{41} + \cdots - 2530360008y + 291623929$
c_{10}	$y^{42} + 10y^{41} + \cdots + 9411y + 1849$
c_{11}	$y^{42} - 57y^{41} + \cdots - 501471y + 88209$

(vi) Complex Volumes and Cusp Shapes

Solutions to I^u_1	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.971644 + 0.228980I$ $a = -0.660225 - 0.077093I$ $b = 0.121229 - 0.121842I$	$-1.74908 - 0.43337I$	$-4.63201 + 0.76425I$
$u = 0.971644 - 0.228980I$ $a = -0.660225 + 0.077093I$ $b = 0.121229 + 0.121842I$	$-1.74908 + 0.43337I$	$-4.63201 - 0.76425I$
$u = -0.935799 + 0.492680I$ $a = 0.995156 + 0.254691I$ $b = 0.697241 - 0.562142I$	$-1.54069 + 4.15417I$	$-3.00000 - 7.39011I$
$u = -0.935799 - 0.492680I$ $a = 0.995156 - 0.254691I$ $b = 0.697241 + 0.562142I$	$-1.54069 - 4.15417I$	$-3.00000 + 7.39011I$
$u = -0.393155 + 0.800612I$ $a = -0.149356 - 0.205071I$ $b = -0.541363 + 0.329653I$	$2.76017 - 1.64933I$	$-1.74728 + 0.60366I$
$u = -0.393155 - 0.800612I$ $a = -0.149356 + 0.205071I$ $b = -0.541363 - 0.329653I$	$2.76017 + 1.64933I$	$-1.74728 - 0.60366I$
$u = 1.104400 + 0.249694I$ $a = 0.436118 - 0.996945I$ $b = 0.530412 + 0.326797I$	$-2.78567 - 0.99125I$	$-11.10311 - 4.39500I$
$u = 1.104400 - 0.249694I$ $a = 0.436118 + 0.996945I$ $b = 0.530412 - 0.326797I$	$-2.78567 + 0.99125I$	$-11.10311 + 4.39500I$
$u = -1.155180 + 0.226642I$ $a = 0.752466 + 0.511395I$ $b = 0.896926 + 1.040480I$	$-1.88826 - 1.20315I$	0
$u = -1.155180 - 0.226642I$ $a = 0.752466 - 0.511395I$ $b = 0.896926 - 1.040480I$	$-1.88826 + 1.20315I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.17730$ $a = 2.81430$ $b = 1.42191$	-4.47617	5.20530
$u = 1.255780 + 0.019663I$ $a = -2.27463 - 0.18547I$ $b = -1.95961 - 0.66957I$	$-7.36750 - 2.87143I$	0
$u = 1.255780 - 0.019663I$ $a = -2.27463 + 0.18547I$ $b = -1.95961 + 0.66957I$	$-7.36750 + 2.87143I$	0
$u = -1.114120 + 0.594857I$ $a = -0.017502 - 0.611763I$ $b = -0.609070 - 0.365005I$	$0.58975 + 6.86368I$	0
$u = -1.114120 - 0.594857I$ $a = -0.017502 + 0.611763I$ $b = -0.609070 + 0.365005I$	$0.58975 - 6.86368I$	0
$u = 0.514470 + 1.177460I$ $a = -0.0735393 - 0.0954487I$ $b = -1.57588 + 0.26064I$	$-5.82264 - 2.10553I$	0
$u = 0.514470 - 1.177460I$ $a = -0.0735393 + 0.0954487I$ $b = -1.57588 - 0.26064I$	$-5.82264 + 2.10553I$	0
$u = -1.367560 + 0.254517I$ $a = -0.890031 + 0.144472I$ $b = -0.850798 - 0.662707I$	$-0.09515 + 5.56736I$	0
$u = -1.367560 - 0.254517I$ $a = -0.890031 - 0.144472I$ $b = -0.850798 + 0.662707I$	$-0.09515 - 5.56736I$	0
$u = 0.574212 + 0.117339I$ $a = -0.393410 - 0.999550I$ $b = -1.252340 - 0.394572I$	$-4.70197 - 3.01261I$	$-11.65660 + 2.21081I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.574212 - 0.117339I$ $a = -0.393410 + 0.999550I$ $b = -1.252340 + 0.394572I$	$-4.70197 + 3.01261I$	$-11.65660 - 2.21081I$
$u = 0.568925 + 0.051008I$ $a = -1.46927 - 0.44701I$ $b = 1.069300 - 0.013204I$	$-2.53352 - 0.05674I$	$-5.88497 - 7.01523I$
$u = 0.568925 - 0.051008I$ $a = -1.46927 + 0.44701I$ $b = 1.069300 + 0.013204I$	$-2.53352 + 0.05674I$	$-5.88497 + 7.01523I$
$u = -0.07204 + 1.42728I$ $a = -0.086850 - 1.160690I$ $b = -0.345695 + 1.176360I$	$5.55360 - 0.39636I$	0
$u = -0.07204 - 1.42728I$ $a = -0.086850 + 1.160690I$ $b = -0.345695 - 1.176360I$	$5.55360 + 0.39636I$	0
$u = 1.48422 + 0.23506I$ $a = -0.717440 - 0.244330I$ $b = -0.52362 - 1.68426I$	$-1.15694 - 4.97445I$	0
$u = 1.48422 - 0.23506I$ $a = -0.717440 + 0.244330I$ $b = -0.52362 + 1.68426I$	$-1.15694 + 4.97445I$	0
$u = 0.11486 + 1.51372I$ $a = -0.0321052 + 0.0488945I$ $b = 2.03791 - 0.23200I$	$-4.38173 + 6.68735I$	0
$u = 0.11486 - 1.51372I$ $a = -0.0321052 - 0.0488945I$ $b = 2.03791 + 0.23200I$	$-4.38173 - 6.68735I$	0
$u = -1.47470 + 0.37744I$ $a = -1.67468 - 0.56566I$ $b = -1.90596 + 0.26710I$	$-12.10630 + 7.14794I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.47470-0.37744I$ $a=-1.67468+0.56566I$ $b=-1.90596-0.26710I$	$-12.10630-7.14794I$	0
$u=-1.62716$ $a=\ \ 1.69579$ $b=\ \ 2.74174$	-10.4541	0
$u=\ \ 1.48967+0.67284I$ $a=\ \ 1.32309-0.83780I$ $b=\ \ 1.98195+0.65769I$	$-8.8694-14.1954I$	0
$u=\ \ 1.48967-0.67284I$ $a=\ \ 1.32309+0.83780I$ $b=\ \ 1.98195-0.65769I$	$-8.8694+14.1954I$	0
$u=\ \ 1.45552+0.81312I$ $a=-1.080210+0.896892I$ $b=-1.75516-0.59909I$	$-8.67069-5.62021I$	0
$u=\ \ 1.45552-0.81312I$ $a=-1.080210-0.896892I$ $b=-1.75516+0.59909I$	$-8.67069+5.62021I$	0
$u=-0.049563+0.302088I$ $a=-1.34651+0.47011I$ $b=\ \ 0.315782+0.486715I$	$-0.096362-1.232180I$	$-1.37808+5.47691I$
$u=-0.049563-0.302088I$ $a=-1.34651-0.47011I$ $b=\ \ 0.315782-0.486715I$	$-0.096362+1.232180I$	$-1.37808-5.47691I$
$u=-1.68157+0.33743I$ $a=\ \ 1.39696+0.40870I$ $b=\ \ 2.25961-0.16660I$	$-11.08320+0.67325I$	0
$u=-1.68157-0.33743I$ $a=\ \ 1.39696-0.40870I$ $b=\ \ 2.25961+0.16660I$	$-11.08320-0.67325I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.0650964+0.0552947I$ $a=-17.7931+18.4218I$ $b=-0.172689-0.653820I$	$5.14610-3.90439I$	$9.21708+9.57987I$
$u=-0.0650964-0.0552947I$ $a=-17.7931-18.4218I$ $b=-0.172689+0.653820I$	$5.14610+3.90439I$	$9.21708-9.57987I$

II. $\boldsymbol{I_2^u = \langle -33u^{12} - 73u^{11} + \cdots + 23b - 41,\ -242u^{12} - 589u^{11} + \cdots + 23a - 362,\ u^{13} + 3u^{12} + \cdots + 3u + 1 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 10.5217u^{12} + 25.6087u^{11} + \cdots + 23.0870u + 15.7391 \\ 1.43478u^{12} + 3.17391u^{11} + \cdots + 1.73913u + 1.78261 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -2.26087u^{12} - 5.30435u^{11} + \cdots - 3.04348u + 2.13043 \\ -0.695652u^{12} - 1.47826u^{11} + \cdots - 3.78261u - 1.65217 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 13.1739u^{12} + 32.8696u^{11} + \cdots + 28.6957u + 19.9130 \\ 2.04348u^{12} + 5.21739u^{11} + \cdots + 1.17391u + 2.47826 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.521739u^{12} + 2.60870u^{11} + \cdots + 0.0869565u + 3.73913 \\ -0.217391u^{12} - 0.0869565u^{11} + \cdots + 0.130435u + 0.608696 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 2.04348u^{12} + 2.21739u^{11} + \cdots + 18.1739u + 5.47826 \\ 1.73913u^{12} + 5.69565u^{11} + \cdots - 2.04348u + 1.13043 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 1.65217u^{12} + 5.26087u^{11} + \cdots + 2.60870u + 4.17391 \\ -0.826087u^{12} - 1.13043u^{11} + \cdots - 1.30435u + 0.913043 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.56522u^{12} - 3.82609u^{11} + \cdots + 0.739130u + 3.78261 \\ -0.695652u^{12} - 1.47826u^{11} + \cdots - 3.78261u - 1.65217 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.56522u^{12} - 3.82609u^{11} + \cdots + 0.739130u + 3.78261 \\ -0.695652u^{12} - 1.47826u^{11} + \cdots - 3.78261u - 1.65217 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{15}{23}u^{12} - \frac{17}{23}u^{11} - \frac{142}{23}u^{10} - \frac{214}{23}u^9 - \frac{218}{23}u^8 + \frac{27}{23}u^7 + \frac{451}{23}u^6 + \frac{459}{23}u^5 + \frac{195}{23}u^4 + \frac{117}{23}u^3 - \frac{246}{23}u^2 - \frac{492}{23}u - \frac{387}{23}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{13} + 3u^{12} + \cdots + 3u + 1$
c_2	$u^{13} + 2u^{12} + \cdots - 2u + 1$
c_3	$u^{13} + 8u^{12} + \cdots - 46u - 11$
c_4	$u^{13} + 2u^{12} + \cdots - 2u - 1$
c_5	$u^{13} - 3u^{12} + \cdots + 3u - 1$
c_6	$u^{13} + 7u^{12} + \cdots - 2u - 1$
c_7	$u^{13} - 2u^{12} + \cdots - 2u - 1$
c_8	$u^{13} + u^{12} + \cdots - u - 1$
c_9	$u^{13} - 2u^{12} + \cdots - 2u + 1$
c_{10}	$u^{13} + u^{12} + \cdots + 2u - 1$
c_{11}	$u^{13} - 2u^{12} + \cdots - 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{13} - 5y^{12} + \cdots + 9y - 1$
c_2, c_7	$y^{13} - 4y^{12} + \cdots - 8y - 1$
c_3	$y^{13} - 16y^{12} + \cdots + 774y - 121$
c_4, c_9	$y^{13} - 12y^{12} + \cdots + 2y - 1$
c_6	$y^{13} - 5y^{12} + \cdots - 10y - 1$
c_8	$y^{13} + 11y^{12} + \cdots - 7y - 1$
c_{10}	$y^{13} - 5y^{12} + \cdots + 2y - 1$
c_{11}	$y^{13} - 8y^{12} + \cdots - 8y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.059650 + 0.184275I$ $a = -0.698885 - 0.288098I$ $b = -0.410177 - 0.918523I$	$-1.83033 - 2.41287I$	$-3.84698 + 4.49416I$
$u = 1.059650 - 0.184275I$ $a = -0.698885 + 0.288098I$ $b = -0.410177 + 0.918523I$	$-1.83033 + 2.41287I$	$-3.84698 - 4.49416I$
$u = 0.798226 + 0.206546I$ $a = 1.21744 + 0.73252I$ $b = -0.927123 + 0.095251I$	$-2.67139 - 0.27850I$	$-30.8698 + 7.4464I$
$u = 0.798226 - 0.206546I$ $a = 1.21744 - 0.73252I$ $b = -0.927123 - 0.095251I$	$-2.67139 + 0.27850I$	$-30.8698 - 7.4464I$
$u = -0.489582 + 0.589438I$ $a = 0.667920 + 0.260518I$ $b = 1.380850 - 0.254889I$	$-3.97791 + 3.45840I$	$-2.92129 - 5.70901I$
$u = -0.489582 - 0.589438I$ $a = 0.667920 - 0.260518I$ $b = 1.380850 + 0.254889I$	$-3.97791 - 3.45840I$	$-2.92129 + 5.70901I$
$u = -1.198530 + 0.532231I$ $a = -0.230268 - 0.024904I$ $b = -0.245939 - 0.621339I$	$1.61052 + 6.86027I$	$0.95342 - 5.99617I$
$u = -1.198530 - 0.532231I$ $a = -0.230268 + 0.024904I$ $b = -0.245939 + 0.621339I$	$1.61052 - 6.86027I$	$0.95342 + 5.99617I$
$u = -0.576690 + 0.127809I$ $a = -0.52909 + 4.02030I$ $b = 0.118700 + 0.564195I$	$4.79973 - 3.69557I$	$-8.48018 - 0.72494I$
$u = -0.576690 - 0.127809I$ $a = -0.52909 - 4.02030I$ $b = 0.118700 - 0.564195I$	$4.79973 + 3.69557I$	$-8.48018 + 0.72494I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.24005+1.43458I$ $a=-0.211506-1.083560I$ $b=-0.301086+1.145810I$	$5.52247-0.94388I$	$-1.35646+9.06354I$
$u=-0.24005-1.43458I$ $a=-0.211506+1.083560I$ $b=-0.301086-1.145810I$	$5.52247+0.94388I$	$-1.35646-9.06354I$
$u=-1.70605$ $a=\ \ 1.56877$ $b=\ \ 2.76956$	-10.1961	10.0430

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{13}+3u^{12}+\cdots+3u+1)(u^{42}+2u^{41}+\cdots+12u-1)$
c_2	$(u^{13}+2u^{12}+\cdots-2u+1)(u^{42}+u^{41}+\cdots+29u+151)$
c_3	$(u^{13}+8u^{12}+\cdots-46u-11)(u^{42}-3u^{41}+\cdots+75u+19)$
c_4	$(u^{13}+2u^{12}+\cdots-2u-1)(u^{42}+3u^{41}+\cdots+21u+13)$
c_5	$(u^{13}-3u^{12}+\cdots+3u-1)(u^{42}+2u^{41}+\cdots+12u-1)$
c_6	$(u^{13}+7u^{12}+\cdots-2u-1)(u^{42}+6u^{41}+\cdots+15u+1)$
c_7	$(u^{13}-2u^{12}+\cdots-2u-1)(u^{42}+u^{41}+\cdots+29u+151)$
c_8	$(u^{13}+u^{12}+\cdots-u-1)(u^{42}-6u^{41}+\cdots-87352u+17077)$
c_9	$(u^{13}-2u^{12}+\cdots-2u+1)(u^{42}+3u^{41}+\cdots+21u+13)$
c_{10}	$(u^{13}+u^{12}+\cdots+2u-1)(u^{42}-2u^{41}+\cdots-423u-43)$
c_{11}	$(u^{13}-2u^{12}+\cdots-2u-1)(u^{42}+u^{41}+\cdots+2205u+297)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{13}-5y^{12}+\cdots+9y-1)(y^{42}-30y^{41}+\cdots-44y+1)$
c_2, c_7	$(y^{13}-4y^{12}+\cdots-8y-1)(y^{42}-57y^{41}+\cdots-202275y+22801)$
c_3	$(y^{13}-16y^{12}+\cdots+774y-121)(y^{42}-61y^{41}+\cdots-7753y+361)$
c_4, c_9	$(y^{13}-12y^{12}+\cdots+2y-1)(y^{42}-25y^{41}+\cdots-2261y+169)$
c_6	$(y^{13}-5y^{12}+\cdots-10y-1)(y^{42}-2y^{41}+\cdots-9y+1)$
c_8	$(y^{13}+11y^{12}+\cdots-7y-1)$ $\cdot(y^{42}-58y^{41}+\cdots-2530360008y+291623929)$
c_{10}	$(y^{13}-5y^{12}+\cdots+2y-1)(y^{42}+10y^{41}+\cdots+9411y+1849)$
c_{11}	$(y^{13}-8y^{12}+\cdots-8y-1)(y^{42}-57y^{41}+\cdots-501471y+88209)$