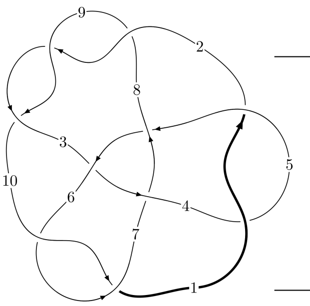
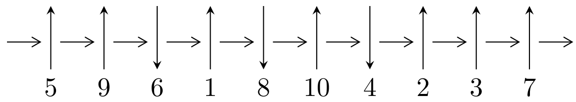
# $10_{100}$ $(K10a_{104})$




A knot diagram[1]

**Linearized knot diagam**




**Solving Sequence**

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

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

$$\begin{aligned}
I_1^u &= \langle -15u^{13} + 70u^{12} + \cdots + 2b - 42,\ 49u^{13} - 224u^{12} + \cdots + 4a + 132,\\
&\quad u^{14} - 6u^{13} + 11u^{12} - 3u^{11} - u^{10} - 22u^9 + 13u^8 + 32u^7 - 3u^6 - 28u^5 - 30u^4 + 36u^3 + 7u^2 - 2u - 4\rangle\\
I_2^u &= \langle -1945u^5a^3 + 869u^5a^2 + \cdots - 1055a - 6821,\ -u^5a^3 + 2u^5a^2 + \cdots - 14a + 22,\\
&\quad u^6 + u^5 - 3u^4 - 2u^3 + 2u^2 - u - 1\rangle\\
I_3^u &= \langle -u^4 + 2u^2 + b,\ u^5 - 3u^3 + u^2 + a + 2u - 1,\ u^6 - u^5 - 3u^4 + 3u^3 + u^2 - u + 1\rangle
\end{aligned}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 44 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.** $\boldsymbol{I_1^u = \langle -15u^{13} + 70u^{12} + \cdots + 2b - 42,\ 49u^{13} - 224u^{12} + \cdots + 4a + 132,\ u^{14} - 6u^{13} + \cdots - 2u - 4\rangle}$

**(i) Arc colorings**

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -\frac{49}{4}u^{13} + 56u^{12} + \cdots - \frac{151}{4}u - 33 \\ \frac{15}{2}u^{13} - 35u^{12} + \cdots + \frac{53}{2}u + 21 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -\frac{7}{2}u^{13} + \frac{33}{2}u^{12} + \cdots - \frac{21}{2}u - \frac{21}{2} \\ \frac{3}{2}u^{13} - 7u^{12} + \cdots + \frac{13}{2}u + 4 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -\frac{19}{4}u^{13} + 21u^{12} + \cdots - \frac{45}{4}u - 12 \\ \frac{15}{2}u^{13} - 35u^{12} + \cdots + \frac{53}{2}u + 21 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 2u^{13} - \frac{17}{2}u^{12} + \cdots + 4u + \frac{7}{2} \\ -\frac{5}{2}u^{13} + 12u^{12} + \cdots - \frac{19}{2}u - 8 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -\frac{3}{4}u^{13} + 5u^{12} + \cdots - \frac{21}{4}u - 4 \\ -\frac{3}{2}u^{13} + 6u^{12} + \cdots - \frac{3}{2}u - 3 \end{pmatrix}$$

**(ii) Obstruction class** $= -1$

**(iii) Cusp Shapes** $= -14u^{13} + 62u^{12} - 57u^{11} - 45u^{10} - 63u^9 + 216u^8 + 154u^7 - 197u^6 - 287u^5 - 60u^4 + 344u^3 + 46u^2 - 26u - 34$

**(iv) u-Polynomials at the component**

| Crossings | u-Polynomials at each crossing |
|---|---|
| $c_1, c_4, c_6$<br>$c_{10}$ | $u^{14} - u^{13} + \cdots - 3u + 1$ |
| $c_2, c_8, c_9$ | $u^{14} - 6u^{13} + \cdots - 2u - 4$ |
| $c_3, c_5$ | $u^{14} + u^{13} + \cdots + 5u - 1$ |
| $c_7$ | $u^{14} + 14u^{13} + \cdots - 288u - 64$ |

**(v) Riley Polynomials at the component**

| Crossings | Riley Polynomials at each crossing |
|---|---|
| $c_1, c_4, c_6$ $c_{10}$ | $y^{14} - 13y^{13} + \cdots - 3y + 1$ |
| $c_2, c_8, c_9$ | $y^{14} - 14y^{13} + \cdots - 60y + 16$ |
| $c_3, c_5$ | $y^{14} + 7y^{13} + \cdots - 59y + 1$ |
| $c_7$ | $y^{14} + 2y^{13} + \cdots - 41984y + 4096$ |

**(vi) Complex Volumes and Cusp Shapes**

| Solutions to $I_1^u$ | $\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$ | Cusp shape |
|---|---|---|
| $u=-1.04049$<br>$a=\ \ 0.567340$<br>$b=-1.20452$ | $0.339162$ | $13.0620$ |
| $u=-0.748785+0.823629I$<br>$a=\ \ 0.412890-0.456902I$<br>$b=\ \ 0.679306+1.137690I$ | $6.90977-8.77559I$ | $9.73876+7.09449I$ |
| $u=-0.748785-0.823629I$<br>$a=\ \ 0.412890+0.456902I$<br>$b=\ \ 0.679306-1.137690I$ | $6.90977+8.77559I$ | $9.73876-7.09449I$ |
| $u=-0.493094+1.098780I$<br>$a=-0.387144-0.128784I$<br>$b=\ \ 0.098682-0.905560I$ | $5.88215+2.52726I$ | $13.28929-3.43101I$ |
| $u=-0.493094-1.098780I$<br>$a=-0.387144+0.128784I$<br>$b=\ \ 0.098682+0.905560I$ | $5.88215-2.52726I$ | $13.28929+3.43101I$ |
| $u=\ \ 0.622591$<br>$a=\ \ 0.542539$<br>$b=\ \ 0.127481$ | $0.865875$ | $12.3760$ |
| $u=\ \ 1.45633+0.05562I$<br>$a=\ \ 0.38364-1.65172I$<br>$b=-0.429494+1.051770I$ | $4.42897+2.24150I$ | $6.33861-3.08717I$ |
| $u=\ \ 1.45633-0.05562I$<br>$a=\ \ 0.38364+1.65172I$<br>$b=-0.429494-1.051770I$ | $4.42897-2.24150I$ | $6.33861+3.08717I$ |
| $u=-0.303715+0.334799I$<br>$a=\ \ 0.003671+1.353790I$<br>$b=-0.729605-0.382323I$ | $-1.31044-0.99980I$ | $-2.51765+3.01751I$ |
| $u=-0.303715-0.334799I$<br>$a=\ \ 0.003671-1.353790I$<br>$b=-0.729605+0.382323I$ | $-1.31044+0.99980I$ | $-2.51765-3.01751I$ |

| Solutions to $I_1^u$ | $\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$ | Cusp shape |
|---|---|---|
| $u = 1.62071 + 0.25886I$<br>$a = -0.06147 + 1.67177I$<br>$b = 1.02771 - 1.53408I$ | $14.7349 + 12.8109I$ | $11.37066 - 6.14968I$ |
| $u = 1.62071 - 0.25886I$<br>$a = -0.06147 - 1.67177I$<br>$b = 1.02771 + 1.53408I$ | $14.7349 - 12.8109I$ | $11.37066 + 6.14968I$ |
| $u = 1.67750 + 0.35344I$<br>$a = -0.156526 - 0.920785I$<br>$b = -0.608077 + 1.061740I$ | $13.16540 + 3.07431I$ | $13.56108 - 2.64554I$ |
| $u = 1.67750 - 0.35344I$<br>$a = -0.156526 + 0.920785I$<br>$b = -0.608077 - 1.061740I$ | $13.16540 - 3.07431I$ | $13.56108 + 2.64554I$ |

**II.** $\boldsymbol{I^u_2 = \langle -1945u^5a^3 + 869u^5a^2 + \cdots - 1055a - 6821,\ -u^5a^3 + 2u^5a^2 + \cdots - 14a + 22,\ u^6 + u^5 - 3u^4 - 2u^3 + 2u^2 - u - 1\rangle}$

**(i) Arc colorings**

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} a \\ 0.413566a^3u^5 - 0.184776a^2u^5 + \cdots + 0.224325a + 1.45035 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.321072a^3u^5 - 0.0750585a^2u^5 + \cdots - 0.0584733a - 1.19796 \\ 0.0450776a^3u^5 - 0.0967468a^2u^5 + \cdots + 0.253243a + 0.104614 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.413566a^3u^5 - 0.184776a^2u^5 + \cdots + 1.22432a + 1.45035 \\ 0.413566a^3u^5 - 0.184776a^2u^5 + \cdots + 0.224325a + 1.45035 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0.503934a^3u^5 - 0.657027a^2u^5 + \cdots - 0.0274293a + 2.75441 \\ 0.182862a^3u^5 - 0.732086a^2u^5 + \cdots - 0.0859026a + 1.55645 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.309802a^3u^5 - 0.150755a^2u^5 + \cdots + 1.24516a + 1.17181 \\ -0.0450776a^3u^5 + 0.0967468a^2u^5 + \cdots - 0.253243a + 0.895386 \end{pmatrix}$$

**(ii) Obstruction class** $= -1$

**(iii) Cusp Shapes** $= \frac{848}{4703}u^5a^3 - \frac{1820}{4703}u^5a^2 + \cdots + \frac{4764}{4703}a + \frac{48998}{4703}$

**(iv) u-Polynomials at the component**

| Crossings | u-Polynomials at each crossing |
|---|---|
| $c_1, c_4, c_6$<br>$c_{10}$ | $u^{24} + u^{23} + \cdots - 8u + 1$ |
| $c_2, c_8, c_9$ | $(u^6 + u^5 - 3u^4 - 2u^3 + 2u^2 - u - 1)^4$ |
| $c_3, c_5$ | $u^{24} - 7u^{23} + \cdots - 372u + 73$ |
| $c_7$ | $(u^2 - u + 1)^{12}$ |

**(v) Riley Polynomials at the component**

| Crossings | Riley Polynomials at each crossing |
|---|---|
| $c_1, c_4, c_6$ $c_{10}$ | $y^{24} - 21y^{23} + \cdots + 72y + 1$ |
| $c_2, c_8, c_9$ | $(y^6 - 7y^5 + 17y^4 - 16y^3 + 6y^2 - 5y + 1)^4$ |
| $c_3, c_5$ | $y^{24} + 11y^{23} + \cdots + 52000y + 5329$ |
| $c_7$ | $(y^2 + y + 1)^{12}$ |

**(vi) Complex Volumes and Cusp Shapes**

| Solutions to $I_2^u$ | $\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$ | Cusp shape |
|---|---|---|
| $u = 0.493180 + 0.575288I$<br>$a = 1.067300 - 0.316742I$<br>$b = -0.073003 - 0.780422I$ | $1.97456 - 0.05747I$ | $6.57572 - 0.22068I$ |
| $u = 0.493180 + 0.575288I$<br>$a = -0.584086 - 0.249616I$<br>$b = -0.678417 + 1.238260I$ | $1.97456 + 4.00229I$ | $6.57572 - 7.14888I$ |
| $u = 0.493180 + 0.575288I$<br>$a = 0.513478 + 1.284170I$<br>$b = 0.629282 - 0.637832I$ | $1.97456 + 4.00229I$ | $6.57572 - 7.14888I$ |
| $u = 0.493180 + 0.575288I$<br>$a = -0.136040 - 0.139388I$<br>$b = 0.617558 + 0.522759I$ | $1.97456 - 0.05747I$ | $6.57572 - 0.22068I$ |
| $u = 0.493180 - 0.575288I$<br>$a = 1.067300 + 0.316742I$<br>$b = -0.073003 + 0.780422I$ | $1.97456 + 0.05747I$ | $6.57572 + 0.22068I$ |
| $u = 0.493180 - 0.575288I$<br>$a = -0.584086 + 0.249616I$<br>$b = -0.678417 - 1.238260I$ | $1.97456 - 4.00229I$ | $6.57572 + 7.14888I$ |
| $u = 0.493180 - 0.575288I$<br>$a = 0.513478 - 1.284170I$<br>$b = 0.629282 + 0.637832I$ | $1.97456 - 4.00229I$ | $6.57572 + 7.14888I$ |
| $u = 0.493180 - 0.575288I$<br>$a = -0.136040 + 0.139388I$<br>$b = 0.617558 - 0.522759I$ | $1.97456 + 0.05747I$ | $6.57572 + 0.22068I$ |
| $u = -0.483672$<br>$a = 1.44157 + 0.74757I$<br>$b = 1.09154 - 1.08035I$ | $5.67365 - 2.02988I$ | $15.4168 + 3.4641I$ |
| $u = -0.483672$<br>$a = 1.44157 - 0.74757I$<br>$b = 1.09154 + 1.08035I$ | $5.67365 + 2.02988I$ | $15.4168 - 3.4641I$ |

| Solutions to $I_2^u$ | $\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$ | Cusp shape |
|---|---|---|
| $u=-0.483672$<br>$a=-2.95401+1.87206I$<br>$b=-0.006188-0.799526I$ | $5.67365-2.02988I$ | $15.4168+3.4641I$ |
| $u=-0.483672$<br>$a=-2.95401-1.87206I$<br>$b=-0.006188+0.799526I$ | $5.67365+2.02988I$ | $15.4168-3.4641I$ |
| $u=-1.52087+0.16310I$<br>$a=\ \ 0.299570-1.150850I$<br>$b=\ \ 0.618593+0.988703I$ | $8.63038-2.56224I$ | $10.58114-0.25928I$ |
| $u=-1.52087+0.16310I$<br>$a=-0.601099+1.113320I$<br>$b=\ \ 0.554158-1.044580I$ | $8.63038-2.56224I$ | $10.58114-0.25928I$ |
| $u=-1.52087+0.16310I$<br>$a=-0.07073-1.79722I$<br>$b=\ \ 0.427101+0.945943I$ | $8.63038-6.62201I$ | $10.58114+6.66892I$ |
| $u=-1.52087+0.16310I$<br>$a=\ \ 0.18899+2.07712I$<br>$b=-1.06187-1.93363I$ | $8.63038-6.62201I$ | $10.58114+6.66892I$ |
| $u=-1.52087-0.16310I$<br>$a=\ \ 0.299570+1.150850I$<br>$b=\ \ 0.618593-0.988703I$ | $8.63038+2.56224I$ | $10.58114+0.25928I$ |
| $u=-1.52087-0.16310I$<br>$a=-0.601099-1.113320I$<br>$b=\ \ 0.554158+1.044580I$ | $8.63038+2.56224I$ | $10.58114+0.25928I$ |
| $u=-1.52087-0.16310I$<br>$a=-0.07073+1.79722I$<br>$b=\ \ 0.427101-0.945943I$ | $8.63038+6.62201I$ | $10.58114-6.66892I$ |
| $u=-1.52087-0.16310I$<br>$a=\ \ 0.18899-2.07712I$<br>$b=-1.06187+1.93363I$ | $8.63038+6.62201I$ | $10.58114-6.66892I$ |

| Solutions to $I_2^u$ | $\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$ | Cusp shape |
|---|---|---|
| $u = 1.53904$<br>$a = -0.49479 + 1.36564I$<br>$b = -0.628935 - 0.898287I$ | $12.59490 - 2.02988I$ | $14.2695 + 3.4641I$ |
| $u = 1.53904$<br>$a = -0.49479 - 1.36564I$<br>$b = -0.628935 + 0.898287I$ | $12.59490 + 2.02988I$ | $14.2695 - 3.4641I$ |
| $u = 1.53904$<br>$a = -1.17015 + 1.51812I$<br>$b = 2.01019 - 1.49411I$ | $12.59490 - 2.02988I$ | $14.2695 + 3.4641I$ |
| $u = 1.53904$<br>$a = -1.17015 - 1.51812I$<br>$b = 2.01019 + 1.49411I$ | $12.59490 + 2.02988I$ | $14.2695 - 3.4641I$ |

**III.**

$$\boldsymbol{I_3^u = \langle -u^4+2u^2+b,\ u^5-3u^3+u^2+a+2u-1,\ u^6-u^5-3u^4+3u^3+u^2-u+1\rangle}$$

**(i) Arc colorings**

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

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

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

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

$$a_6 = \begin{pmatrix} -u^5+3u^3-u^2-2u+1 \\ u^4-2u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^5-3u^3+2u \\ -u^3+2u \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -u^5+u^4+3u^3-3u^2-2u+1 \\ u^4-2u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^5-u^4-4u^3+3u^2+3u-1 \\ u^5-3u^3+u^2+2u-1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^5+u^4+3u^3-3u^2-2u+2 \\ -u^5+u^4+3u^3-3u^2-u+1 \end{pmatrix}$$

**(ii) Obstruction class** $= 1$

**(iii) Cusp Shapes** $= -4u^5+2u^4+8u^3-4u^2+3u+7$

**(iv) u-Polynomials at the component**

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

**(v) Riley Polynomials at the component**

| Crossings | Riley Polynomials at each crossing |
|---|---|
| $c_1, c_4, c_6$ $c_{10}$ | $y^6 - 7y^5 + 21y^4 - 35y^3 + 33y^2 - 15y + 1$ |
| $c_2, c_8, c_9$ | $y^6 - 7y^5 + 17y^4 - 15y^3 + y^2 + y + 1$ |
| $c_3, c_5$ | $y^6 + y^5 - 3y^4 - 3y^3 + y^2 + y + 1$ |
| $c_7$ | $y^6 + y^5 + y^4 - 3y^3 - 3y^2 + y + 1$ |

**(vi) Complex Volumes and Cusp Shapes**

| Solutions to $I_3^u$ | $\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$ | Cusp shape |
|---|---|---|
| $u = -0.847445$<br>$a = 0.587994$<br>$b = -0.920568$ | $-0.285060$ | $-0.503990$ |
| $u = 0.251489 + 0.528716I$<br>$a = 0.07352 - 1.42421I$<br>$b = 0.408651 - 0.646904I$ | $4.59420 - 1.63935I$ | $6.79257 + 0.07886I$ |
| $u = 0.251489 - 0.528716I$<br>$a = 0.07352 + 1.42421I$<br>$b = 0.408651 + 0.646904I$ | $4.59420 + 1.63935I$ | $6.79257 - 0.07886I$ |
| $u = 1.46321 + 0.18726I$<br>$a = -0.71355 - 1.48541I$<br>$b = -0.077247 + 1.212100I$ | $9.23208 + 4.33255I$ | $12.59516 - 4.05038I$ |
| $u = 1.46321 - 0.18726I$<br>$a = -0.71355 + 1.48541I$<br>$b = -0.077247 - 1.212100I$ | $9.23208 - 4.33255I$ | $12.59516 + 4.05038I$ |
| $u = -1.58196$<br>$a = -0.307931$<br>$b = 1.25776$ | $12.1109$ | $12.7290$ |

## IV. u-Polynomials

| Crossings | u-Polynomials at each crossing |
|---|---|
| $c_1, c_6$ | $(u^6 - u^5 - 3u^4 + 3u^3 + 3u^2 - 3u - 1)(u^{14} - u^{13} + \cdots - 3u + 1)$ <br> $\cdot\,(u^{24} + u^{23} + \cdots - 8u + 1)$ |
| $c_2$ | $(u^6 + u^5 - 3u^4 - 3u^3 + u^2 + u + 1)(u^6 + u^5 - 3u^4 - 2u^3 + 2u^2 - u - 1)^4$ <br> $\cdot\,(u^{14} - 6u^{13} + \cdots - 2u - 4)$ |
| $c_3, c_5$ | $(u^6 + u^5 + u^4 + u^3 - u^2 - u - 1)(u^{14} + u^{13} + \cdots + 5u - 1)$ <br> $\cdot\,(u^{24} - 7u^{23} + \cdots - 372u + 73)$ |
| $c_4, c_{10}$ | $(u^6 + u^5 - 3u^4 - 3u^3 + 3u^2 + 3u - 1)(u^{14} - u^{13} + \cdots - 3u + 1)$ <br> $\cdot\,(u^{24} + u^{23} + \cdots - 8u + 1)$ |
| $c_7$ | $(u^2 - u + 1)^{12}(u^6 - u^5 + u^4 + u^3 - u^2 + u - 1)$ <br> $\cdot\,(u^{14} + 14u^{13} + \cdots - 288u - 64)$ |
| $c_8, c_9$ | $(u^6 - u^5 - 3u^4 + 3u^3 + u^2 - u + 1)(u^6 + u^5 - 3u^4 - 2u^3 + 2u^2 - u - 1)^4$ <br> $\cdot\,(u^{14} - 6u^{13} + \cdots - 2u - 4)$ |

## V. Riley Polynomials

| Crossings | Riley Polynomials at each crossing |
|---|---|
| $c_1, c_4, c_6$ <br> $c_{10}$ | $(y^6 - 7y^5 + \cdots - 15y + 1)(y^{14} - 13y^{13} + \cdots - 3y + 1)$ <br> $\cdot (y^{24} - 21y^{23} + \cdots + 72y + 1)$ |
| $c_2, c_8, c_9$ | $(y^6 - 7y^5 + 17y^4 - 16y^3 + 6y^2 - 5y + 1)^4$ <br> $\cdot (y^6 - 7y^5 + \cdots + y + 1)(y^{14} - 14y^{13} + \cdots - 60y + 16)$ |
| $c_3, c_5$ | $(y^6 + y^5 - 3y^4 - 3y^3 + y^2 + y + 1)(y^{14} + 7y^{13} + \cdots - 59y + 1)$ <br> $\cdot (y^{24} + 11y^{23} + \cdots + 52000y + 5329)$ |
| $c_7$ | $(y^2 + y + 1)^{12}(y^6 + y^5 + y^4 - 3y^3 - 3y^2 + y + 1)$ <br> $\cdot (y^{14} + 2y^{13} + \cdots - 41984y + 4096)$ |