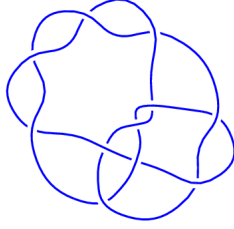
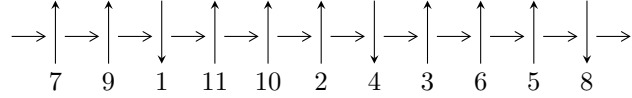


11a₃₁₃ (K11a₃₁₃)

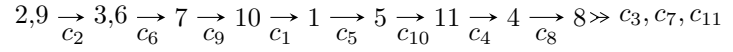


1

Arc Sequences



Solving Sequence



Representation Ideals

$$I = \bigcap_{i=1}^3 I_i^u$$

$$I_1^u = \langle u^{10} + 5u^8 - u^7 + 10u^6 - 3u^5 + 9u^4 - 2u^3 + 4u^2 - u + 1, b + u, 2u^9 + 9u^7 - 3u^6 + 15u^5 - 9u^4 + 9u^3 - 7u^2 + a + 2u - 3 \rangle$$

$$I_2^u = \langle u^{18} + 10u^{16} + \dots + 2u + 1, b - u, -85u^{17} + 65u^{16} + \dots + 39a - 191 \rangle$$

$$I_3^u = \langle u^{30} - u^{29} + \dots - 312u + 43, 4.94070 \times 10^{34}u^{29} - 3.50233 \times 10^{34}u^{28} + \dots + 7.82516 \times 10^{34}a - 7.09561 \times 10^{34}b + 5.00492 \times 10^{35}u^{29} - 3.49756 \times 10^{35}u^{28} + \dots + 2.17103 \times 10^{36}b - 7.36094 \times 10^{37} \rangle$$

There are 3 irreducible components with 58 representations.

¹The knot diagram image is adapter from “C. Livingston and A. H. Moore, KnotInfo: Table of Knot Invariants, <http://www.indiana.edu/~knotinfo>”

$$\text{I. } I_1^u = \langle u^{10} + 5u^8 + \dots - u + 1, b + u, 2u^9 + 9u^7 + \dots + a - 3 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_2 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -2u^9 - 9u^7 + 3u^6 - 15u^5 + 9u^4 - 9u^3 + 7u^2 - 2u + 3 \\ -u \end{pmatrix} \\ a_3 &= \begin{pmatrix} u^8 + u^7 + 5u^6 + 3u^5 + 9u^4 + 3u^3 + 6u^2 + u + 3 \\ -u^2 \end{pmatrix} \\ a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_7 &= \begin{pmatrix} u \\ u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -2u^9 - 9u^7 + 3u^6 - 15u^5 + 9u^4 - 9u^3 + 7u^2 - 2u + 3 \\ -u^9 - u^8 - 5u^7 - 3u^6 - 9u^5 - 3u^4 - 6u^3 - u^2 - 3u \end{pmatrix} \\ a_1 &= \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -2u^9 - u^8 - 10u^7 - 3u^6 - 19u^5 - 4u^4 - 15u^3 - 4u^2 - 6u \\ u^9 + u^8 + 5u^7 + 3u^6 + 9u^5 + 2u^4 + 6u^3 - u^2 + 2u - 1 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 2u^9 + 9u^7 - 3u^6 + 15u^5 - 9u^4 + 9u^3 - 7u^2 + 2u - 4 \\ u^4 + 3u^2 + 1 \end{pmatrix} \\ a_4 &= \begin{pmatrix} u^8 + u^7 + 5u^6 + 3u^5 + 9u^4 + 3u^3 + 6u^2 + u + 2 \\ -u^9 - 4u^7 + u^6 - 6u^5 + 2u^4 - 3u^3 - u^2 - u \end{pmatrix} \\ a_8 &= \begin{pmatrix} -u^9 + u^8 - 4u^7 + 6u^6 - 6u^5 + 12u^4 - 3u^3 + 8u^2 + u + 3 \\ -u^3 - u \end{pmatrix} \\ a_8 &= \begin{pmatrix} -u^9 + u^8 - 4u^7 + 6u^6 - 6u^5 + 12u^4 - 3u^3 + 8u^2 + u + 3 \\ -u^3 - u \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.49614 - 1.46543I$		
$a = 1.054515 + 0.305991I$	$-15.7373 + 3.0886I$	$-1.21096 - 0.80248I$
$b = 0.49614 + 1.46543I$		
$u = -0.49614 + 1.46543I$		
$a = 1.054515 - 0.305991I$	$-15.7373 - 3.0886I$	$-1.21096 + 0.80248I$
$b = 0.49614 - 1.46543I$		
$u = -0.364624 - 0.661478I$		
$a = -0.513338 + 0.036521I$	$-2.02504 + 3.13412I$	$-3.07437 - 5.25222I$
$b = 0.364624 + 0.661478I$		
$u = -0.364624 + 0.661478I$		
$a = -0.513338 - 0.036521I$	$-2.02504 - 3.13412I$	$-3.07437 + 5.25222I$
$b = 0.364624 - 0.661478I$		
$u = 0.16547 - 1.41388I$		
$a = -0.558986 - 0.205903I$	$-6.79753 - 1.39846I$	$-1.69965 + 0.73977I$
$b = -0.16547 + 1.41388I$		
$u = 0.16547 + 1.41388I$		
$a = -0.558986 + 0.205903I$	$-6.79753 + 1.39846I$	$-1.69965 - 0.73977I$
$b = -0.16547 - 1.41388I$		
$u = 0.341703 - 0.889497I$		
$a = -1.058847 + 0.605957I$	$-4.71292 - 1.66512I$	$-5.84532 + 3.74292I$
$b = -0.341703 + 0.889497I$		
$u = 0.341703 + 0.889497I$		
$a = -1.058847 - 0.605957I$	$-4.71292 + 1.66512I$	$-5.84532 - 3.74292I$
$b = -0.341703 - 0.889497I$		
$u = 0.353586 - 0.522473I$		
$a = 2.07666 - 1.27165I$	$-8.56067 - 4.15690I$	$-5.16970 + 5.09058I$
$b = -0.353586 + 0.522473I$		
$u = 0.353586 + 0.522473I$		
$a = 2.07666 + 1.27165I$	$-8.56067 + 4.15690I$	$-5.16970 - 5.09058I$
$b = -0.353586 - 0.522473I$		

$$\text{II. } I_2^u = \langle u^{18} + 10u^{16} + \dots + 2u + 1, b - u, -85u^{17} + 65u^{16} + \dots + 39a - 191 \rangle$$

(i) Arc colorings

$$\begin{aligned}
a_2 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\
a_9 &= \begin{pmatrix} 2.17949u^{17} - 1.66667u^{16} + \dots + 4.69231u + 4.89744 \\ u \end{pmatrix} \\
a_3 &= \begin{pmatrix} 1.66667u^{17} - 0.871795u^{16} + \dots - 0.538462u + 3.17949 \\ -u^2 \end{pmatrix} \\
a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\
a_7 &= \begin{pmatrix} u \\ u \end{pmatrix} \\
a_{10} &= \begin{pmatrix} 2.17949u^{17} - 1.66667u^{16} + \dots + 4.69231u + 4.89744 \\ -0.871795u^{17} + 0.589744u^{16} + \dots - 0.153846u - 1.66667 \end{pmatrix} \\
a_1 &= \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix} \\
a_5 &= \begin{pmatrix} -3.15385u^{17} + 1.46154u^{16} + \dots - 0.846154u - 6.92308 \\ -0.333333u^{17} + 0.282051u^{16} + \dots - 0.384615u - 0.205128 \end{pmatrix} \\
a_{11} &= \begin{pmatrix} -2.76923u^{17} + 1.46154u^{16} + \dots - 0.0769231u - 4 \\ \frac{41}{39}u^{17} - \frac{1}{3}u^{16} + \dots - \frac{3}{13}u + \frac{49}{39} \end{pmatrix} \\
a_4 &= \begin{pmatrix} 2.15385u^{17} - 1.15385u^{16} + \dots - 0.846154u + 4.15385 \\ -0.102564u^{17} - 0.179487u^{16} + \dots - 0.384615u + 0.102564 \end{pmatrix} \\
a_8 &= \begin{pmatrix} 3.05128u^{17} - 2.25641u^{16} + \dots + 4.84615u + 6.56410 \\ u^3 + u \end{pmatrix} \\
a_8 &= \begin{pmatrix} 3.05128u^{17} - 2.25641u^{16} + \dots + 4.84615u + 6.56410 \\ u^3 + u \end{pmatrix}
\end{aligned}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.532251 - 0.067784I$		
$a = -0.54270 - 2.89530I$	$-7.84988 + 3.77391I$	$4.41683 - 0.84733I$
$b = -0.532251 - 0.067784I$		
$u = -0.532251 + 0.067784I$		
$a = -0.54270 + 2.89530I$	$-7.84988 - 3.77391I$	$4.41683 + 0.84733I$
$b = -0.532251 + 0.067784I$		
$u = -0.456668 - 0.300485I$		
$a = -0.818278 + 0.066824I$	$0.864807 + 0.492874I$	$9.89914 - 4.36324I$
$b = -0.456668 - 0.300485I$		
$u = -0.456668 + 0.300485I$		
$a = -0.818278 - 0.066824I$	$0.864807 - 0.492874I$	$9.89914 + 4.36324I$
$b = -0.456668 + 0.300485I$		
$u = -0.37724 - 1.50181I$		
$a = -0.743109 + 0.201458I$	$-9.66105 + 10.31281I$	$-2.35535 - 7.07108I$
$b = -0.37724 - 1.50181I$		
$u = -0.37724 + 1.50181I$		
$a = -0.743109 - 0.201458I$	$-9.66105 - 10.31281I$	$-2.35535 + 7.07108I$
$b = -0.37724 + 1.50181I$		
$u = -0.31597 - 1.43682I$		
$a = -1.199069 - 0.114316I$	$-17.8610 + 4.5054I$	$-5.83423 - 2.80770I$
$b = -0.31597 - 1.43682I$		
$u = -0.31597 + 1.43682I$		
$a = -1.199069 + 0.114316I$	$-17.8610 - 4.5054I$	$-5.83423 + 2.80770I$
$b = -0.31597 + 1.43682I$		
$u = 0.057800 - 1.389743I$		
$a = 0.712007 + 0.530658I$	$-8.45479 - 0.42847I$	$-5.71443 - 0.57034I$
$b = 0.057800 - 1.389743I$		
$u = 0.057800 + 1.389743I$		
$a = 0.712007 - 0.530658I$	$-8.45479 + 0.42847I$	$-5.71443 + 0.57034I$
$b = 0.057800 + 1.389743I$		

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.170675 - 1.401185I$	$-6.07729 - 5.27732I$	$-1.03667 + 5.17608I$
$a = 0.169884 + 0.648808I$		
$b = 0.170675 - 1.401185I$		
$u = 0.170675 + 1.401185I$	$-6.07729 + 5.27732I$	$-1.03667 - 5.17608I$
$a = 0.169884 - 0.648808I$		
$b = 0.170675 + 1.401185I$		
$u = 0.373451 - 0.716634I$	$-3.71490 - 1.64606I$	$3.60086 + 4.30018I$
$a = 1.39886 - 0.75509I$		
$b = 0.373451 - 0.716634I$		
$u = 0.373451 + 0.716634I$	$-3.71490 + 1.64606I$	$3.60086 - 4.30018I$
$a = 1.39886 + 0.75509I$		
$b = 0.373451 + 0.716634I$		
$u = 0.53332 - 1.63208I$	$-19.2814 - 13.3553I$	$-3.21813 + 6.04416I$
$a = 0.987657 - 0.222927I$		
$b = 0.53332 - 1.63208I$		
$u = 0.53332 + 1.63208I$	$-19.2814 + 13.3553I$	$-3.21813 - 6.04416I$
$a = 0.987657 + 0.222927I$		
$b = 0.53332 + 1.63208I$		
$u = 0.546891 - 0.052232I$	$-0.34160 + 2.17443I$	$5.24199 - 4.45398I$
$a = 0.534744 + 1.202005I$		
$b = 0.546891 - 0.052232I$		
$u = 0.546891 + 0.052232I$	$-0.34160 - 2.17443I$	$5.24199 + 4.45398I$
$a = 0.534744 - 1.202005I$		
$b = 0.546891 + 0.052232I$		

$$\text{III. } I_3^u = \langle u^{30} - u^{29} + \dots - 312u + 43, 4.94 \times 10^{34} u^{29} - 3.50 \times 10^{34} u^{28} + \dots + 7.83 \times 10^{34} a - 7.10 \times 10^{36}, 5.00 \times 10^{35} u^{29} - 3.50 \times 10^{35} u^{28} + \dots + 2.17 \times 10^{36} b - 7.36 \times 10^{37} \rangle$$

(i) Arc colorings

$$\begin{aligned} a_2 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -0.631387u^{29} + 0.447573u^{28} + \dots - 349.423u + 90.6768 \\ -0.230533u^{29} + 0.161102u^{28} + \dots - 126.806u + 33.9053 \end{pmatrix} \\ a_3 &= \begin{pmatrix} 0.00971822u^{29} + 0.000697935u^{28} + \dots - 5.10605u + 6.66107 \\ 0.164788u^{29} - 0.146575u^{28} + \dots + 86.6775u - 20.9605 \end{pmatrix} \\ a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_7 &= \begin{pmatrix} u \\ u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -0.631387u^{29} + 0.447573u^{28} + \dots - 349.423u + 90.6768 \\ -0.194436u^{29} + 0.131517u^{28} + \dots - 96.6053u + 26.0013 \end{pmatrix} \\ a_1 &= \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -0.303838u^{29} + 0.216707u^{28} + \dots - 170.058u + 47.7168 \\ 0.0303208u^{29} - 0.0630440u^{28} + \dots + 23.8129u - 4.16450 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} -0.229652u^{29} + 0.167582u^{28} + \dots - 137.015u + 37.0344 \\ 0.0501183u^{29} - 0.0376879u^{28} + \dots + 19.9975u - 4.92736 \end{pmatrix} \\ a_4 &= \begin{pmatrix} -0.166498u^{29} + 0.136596u^{28} + \dots - 101.286u + 30.6929 \\ 0.130762u^{29} - 0.0892386u^{28} + \dots + 72.9398u - 18.2246 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.452497u^{29} - 0.377136u^{28} + \dots + 270.382u - 72.7846 \\ -0.0641724u^{29} - 0.0763861u^{28} + \dots + 13.0701u - 2.51689 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.452497u^{29} - 0.377136u^{28} + \dots + 270.382u - 72.7846 \\ -0.0641724u^{29} - 0.0763861u^{28} + \dots + 13.0701u - 2.51689 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.160792 - 0.317761I$		
$a = 0.381554 + 0.658442I$	$-3.73048 + 5.04209I$	$-1.37593 - 7.20234I$
$b = 0.234316 + 1.183141I$		
$u = -1.160792 + 0.317761I$		
$a = 0.381554 - 0.658442I$	$-3.73048 - 5.04209I$	$-1.37593 + 7.20234I$
$b = 0.234316 - 1.183141I$		
$u = -0.766450 - 0.077304I$		
$a = 0.29547 + 2.17684I$	$-12.86897 + 0.50362I$	$-2.40898 + 0.61717I$
$b = -0.21387 + 1.49460I$		
$u = -0.766450 + 0.077304I$		
$a = 0.29547 - 2.17684I$	$-12.86897 - 0.50362I$	$-2.40898 - 0.61717I$
$b = -0.21387 - 1.49460I$		
$u = -0.54044 - 1.64198I$		
$a = 0.528870 + 0.031758I$	$-7.86806 + 2.21397I$	$-7.90519 - 4.22289I$
$b = 0.108422 + 1.309174I$		
$u = -0.54044 + 1.64198I$		
$a = 0.528870 - 0.031758I$	$-7.86806 - 2.21397I$	$-7.90519 + 4.22289I$
$b = 0.108422 - 1.309174I$		
$u = -0.387870 - 0.972540I$		
$a = 0.147284 - 0.369298I$	$-1.02849 + 2.82812I$	$7.11859 - 2.97945I$
$b = 0.526639 + 0.129172I$		
$u = -0.387870 + 0.972540I$		
$a = 0.147284 + 0.369298I$	$-1.02849 - 2.82812I$	$7.11859 + 2.97945I$
$b = 0.526639 - 0.129172I$		
$u = -0.302088 - 1.350304I$		
$a = 1.201997 + 0.225822I$	$-17.0065 + 3.3317I$	$-8.93825 - 2.36228I$
$b = 0.83520 + 1.86539I$		
$u = -0.302088 + 1.350304I$		
$a = 1.201997 - 0.225822I$	$-17.0065 - 3.3317I$	$-8.93825 + 2.36228I$
$b = 0.83520 - 1.86539I$		

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.21387 - 1.49460I$		
$a = -1.103431 - 0.196824I$	$-12.86897 - 0.50362I$	$-2.40898 - 0.61717I$
$b = -0.766450 + 0.077304I$		
$u = -0.21387 + 1.49460I$		
$a = -1.103431 + 0.196824I$	$-12.86897 + 0.50362I$	$-2.40898 + 0.61717I$
$b = -0.766450 - 0.077304I$		
$u = -0.16828 - 1.41140I$		
$a = 1.186352 + 0.100225I$	$-12.8690 + 6.1599I$	$-2.40898 - 5.34173I$
$b = 1.55103 + 0.38293I$		
$u = -0.16828 + 1.41140I$		
$a = 1.186352 - 0.100225I$	$-12.8690 - 6.1599I$	$-2.40898 + 5.34173I$
$b = 1.55103 - 0.38293I$		
$u = 0.108422 - 1.309174I$		
$a = -0.686498 - 0.121638I$	$-7.86806 - 2.21397I$	$-7.90519 + 4.22289I$
$b = -0.54044 + 1.64198I$		
$u = 0.108422 + 1.309174I$		
$a = -0.686498 + 0.121638I$	$-7.86806 + 2.21397I$	$-7.90519 - 4.22289I$
$b = -0.54044 - 1.64198I$		
$u = 0.183831 - 1.369175I$		
$a = -0.040099 - 0.298656I$	-5.16607	0.589325
$b = 0.183831 + 1.369175I$		
$u = 0.183831 + 1.369175I$		
$a = -0.040099 + 0.298656I$	-5.16607	0.589325
$b = 0.183831 - 1.369175I$		
$u = 0.234316 - 1.183141I$		
$a = -0.757870 - 0.047413I$	$-3.73048 - 5.04209I$	$-1.37593 + 7.20234I$
$b = -1.160792 + 0.317761I$		
$u = 0.234316 + 1.183141I$		
$a = -0.757870 + 0.047413I$	$-3.73048 + 5.04209I$	$-1.37593 - 7.20234I$
$b = -1.160792 - 0.317761I$		

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.289749 - 0.012371I$ $a = -0.93527 + 3.01636I$ $b = 0.310607 + 1.128978I$	$-3.73048 + 0.61415I$	$-1.37593 + 1.24344I$
$u = 0.289749 + 0.012371I$ $a = -0.93527 - 3.01636I$ $b = 0.310607 - 1.128978I$	$-3.73048 - 0.61415I$	$-1.37593 - 1.24344I$
$u = 0.310607 - 1.128978I$ $a = 0.676256 - 0.393034I$ $b = 0.289749 + 0.012371I$	$-3.73048 - 0.61415I$	$-1.37593 - 1.24344I$
$u = 0.310607 + 1.128978I$ $a = 0.676256 + 0.393034I$ $b = 0.289749 - 0.012371I$	$-3.73048 + 0.61415I$	$-1.37593 + 1.24344I$
$u = 0.526639 - 0.129172I$ $a = -0.745598 - 0.182877I$ $b = -0.387870 + 0.972540I$	$-1.02849 - 2.82812I$	$7.11859 + 2.97945I$
$u = 0.526639 + 0.129172I$ $a = -0.745598 + 0.182877I$ $b = -0.387870 - 0.972540I$	$-1.02849 + 2.82812I$	$7.11859 - 2.97945I$
$u = 0.83520 - 1.86539I$ $a = -0.766894 + 0.312174I$ $b = -0.302088 + 1.350304I$	$-17.0065 - 3.3317I$	$-8.93825 + 2.36228I$
$u = 0.83520 + 1.86539I$ $a = -0.766894 - 0.312174I$ $b = -0.302088 - 1.350304I$	$-17.0065 + 3.3317I$	$-8.93825 - 2.36228I$
$u = 1.55103 - 0.38293I$ $a = -0.289102 + 1.019048I$ $b = -0.16828 + 1.41140I$	$-12.8690 - 6.1599I$	$-2.40898 + 5.34173I$
$u = 1.55103 + 0.38293I$ $a = -0.289102 - 1.019048I$ $b = -0.16828 - 1.41140I$	$-12.8690 + 6.1599I$	$-2.40898 - 5.34173I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1, c_8	$(u^{10} + 5u^8 - u^7 + 10u^6 - 3u^5 + 9u^4 - 2u^3 + 4u^2 - u + 1)$ $(u^{18} + 10u^{16} + \dots - 2u + 1)(u^{30} + u^{29} + \dots + 312u + 43)$
c_2, c_6	$(u^{10} + 5u^8 + u^7 + 10u^6 + 3u^5 + 9u^4 + 2u^3 + 4u^2 + u + 1)$ $(u^{18} + 10u^{16} + \dots - 2u + 1)(u^{30} + u^{29} + \dots + 312u + 43)$
c_3	$(u^3 - u^2 + 1)^{10}(u^{10} + 3u^9 + 4u^8 + u^7 - 3u^6 - 2u^5 + 3u^4 + 3u^3 + 1)$ $(u^{18} + 16u^{17} + \dots + 336u + 32)$
c_4, c_5	$(u^5 - u^4 + 4u^3 - 3u^2 + 3u - 1)^6$ $(u^{10} + 7u^8 + 17u^6 + 17u^4 + u^3 + 7u^2 + 2u + 1)$ $(u^{18} + 7u^{17} + \dots + 76u + 8)$
c_7, c_{11}	$(u^{10} - u^9 + \dots - 2u + 1)(u^{18} + u^{17} + \dots - u + 1)$ $(u^{30} + 3u^{29} + \dots + 54u + 77)$
c_9, c_{10}	$(u^5 - u^4 + 4u^3 - 3u^2 + 3u - 1)^6$ $(u^{10} + 7u^8 + 17u^6 + 17u^4 - u^3 + 7u^2 - 2u + 1)$ $(u^{18} + 7u^{17} + \dots + 76u + 8)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1, c_2, c_6 c_8	$(y^{10} + 10y^9 + \dots + 7y + 1)(y^{18} + 20y^{17} + \dots - 10y + 1)$ $(y^{30} + 27y^{29} + \dots - 46776y + 1849)$
c_3	$(y^3 - y^2 + 2y - 1)^{10}$ $(y^{10} - y^9 + 4y^8 - 7y^7 + 19y^6 - 26y^5 + 29y^4 - 15y^3 + 6y^2 + 1)$ $(y^{18} - 2y^{17} + \dots + 1280y + 1024)$
c_4, c_5, c_9 c_{10}	$(-1 + 3y + 13y^2 + 16y^3 + 7y^4 + y^5)^6(y^{10} + 14y^9 + \dots + 10y + 1)$ $(y^{18} + 21y^{17} + \dots - 80y + 64)$
c_7, c_{11}	$(y^{10} - 3y^9 + 9y^8 - 11y^7 + 15y^6 - 11y^5 + 9y^4 - y^2 - 2y + 1)$ $(y^{18} - 9y^{17} + \dots + 5y + 1)(y^{30} - 9y^{29} + \dots - 103632y + 5929)$