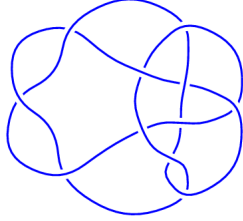
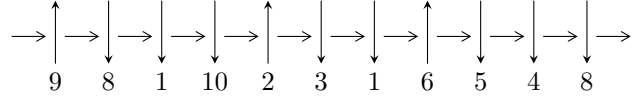


11n₁₆₁ (K11n₁₆₁)

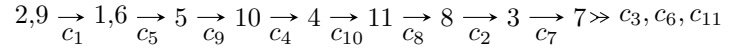


1

Arc Sequences



Solving Sequence



Representation Ideals

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

$$I_1^u = \langle u^{10} - u^9 - u^8 + u^7 + 5u^6 - 3u^5 - 3u^4 + u^3 + 3u^2 - 3u + 1, b + u, 14u^9 - u^8 - 16u^7 - 3u^6 + 69u^5 + 26u^4 - 25u^3 - 21u^2 + 5a + 20u - 12 \rangle$$

$$I_2^u = \langle u^{17} + u^{16} - u^{15} - u^{14} + 9u^{13} + 7u^{12} - 5u^{11} - 2u^{10} + 18u^9 + 12u^8 - 4u^7 - 5u^6 + 5u^5 - u^4 - u^3 - u^2 + u - 32825u^{16} + 78351u^{15} + \dots + 149349a - 108694 \rangle$$

$$I_3^u = \langle u^{24} + 3u^{23} + \dots + 46u + 11, 6.45612 \times 10^{27}u^{23} + 1.61756 \times 10^{28}u^{22} + \dots + 5.13568 \times 10^{28}a + 1.36907 \times 10^{29}b + 1.70203 \times 10^{30}u^{23} + 4.57303 \times 10^{30}u^{22} + \dots + 8.77268 \times 10^{30}b + 5.47196 \times 10^{31} \rangle$$

There are 3 irreducible components with 51 representations.

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

$$\text{I. } I_1^u = \langle u^{10} - u^9 + \dots - 3u + 1, b + u, 14u^9 - u^8 + \dots + 5a - 12 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_2 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -\frac{14}{5}u^9 + \frac{1}{5}u^8 + \dots - 4u + \frac{12}{5} \\ -u \end{pmatrix} \\ a_1 &= \begin{pmatrix} \frac{13}{5}u^9 - \frac{2}{5}u^8 + \dots + 6u - \frac{9}{5} \\ u^2 \end{pmatrix} \\ a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_5 &= \begin{pmatrix} -u \\ u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -\frac{3}{5}u^9 - \frac{3}{5}u^8 + \dots + u - \frac{1}{5} \\ -\frac{11}{5}u^9 + \frac{4}{5}u^8 + \dots - 6u + \frac{13}{5} \end{pmatrix} \\ a_4 &= \begin{pmatrix} -\frac{4}{5}u^9 + \frac{1}{5}u^8 + \dots - 4u + \frac{2}{5} \\ 2u^9 - u^8 - 3u^7 + u^6 + 11u^5 - u^4 - 8u^3 - 2u^2 + 6u - 3 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} \frac{28}{5}u^9 - \frac{12}{5}u^8 + \dots + 16u - \frac{39}{5} \\ \frac{1}{5}u^9 + \frac{1}{5}u^8 + \dots - u - \frac{3}{5} \end{pmatrix} \\ a_8 &= \begin{pmatrix} -\frac{14}{5}u^9 + \frac{1}{5}u^8 + \dots - 4u + \frac{12}{5} \\ -\frac{11}{5}u^9 + \frac{4}{5}u^8 + \dots - 6u + \frac{13}{5} \end{pmatrix} \\ a_3 &= \begin{pmatrix} \frac{1}{5}u^9 + \frac{1}{5}u^8 + \dots - u + \frac{7}{5} \\ \frac{6}{5}u^9 - \frac{4}{5}u^8 + \dots + 5u - \frac{13}{5} \end{pmatrix} \\ a_7 &= \begin{pmatrix} -\frac{11}{5}u^9 - \frac{1}{5}u^8 + \dots - 3u - \frac{2}{5} \\ -\frac{9}{5}u^9 + \frac{6}{5}u^8 + \dots - 5u + \frac{12}{5} \end{pmatrix} \\ a_7 &= \begin{pmatrix} -\frac{11}{5}u^9 - \frac{1}{5}u^8 + \dots - 3u - \frac{2}{5} \\ -\frac{9}{5}u^9 + \frac{6}{5}u^8 + \dots - 5u + \frac{12}{5} \end{pmatrix} \end{aligned}$$

(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
$u = -0.914629 - 0.935183I$		
$a = -0.112008 - 0.341459I$	$-2.02274 - 3.06369I$	$-5.25989 + 0.93808I$
$b = 0.914629 + 0.935183I$		
$u = -0.914629 + 0.935183I$		
$a = -0.112008 + 0.341459I$	$-2.02274 + 3.06369I$	$-5.25989 - 0.93808I$
$b = 0.914629 - 0.935183I$		
$u = -0.914248 - 0.570518I$		
$a = -1.119994 - 0.219282I$	$1.60755 + 3.42301I$	$1.79285 - 5.67056I$
$b = 0.914248 + 0.570518I$		
$u = -0.914248 + 0.570518I$		
$a = -1.119994 + 0.219282I$	$1.60755 - 3.42301I$	$1.79285 + 5.67056I$
$b = 0.914248 - 0.570518I$		
$u = 0.380408 - 0.491558I$		
$a = 0.39322 - 1.67428I$	$-5.23124 + 0.62784I$	$-5.27518 + 0.19626I$
$b = -0.380408 + 0.491558I$		
$u = 0.380408 + 0.491558I$		
$a = 0.39322 + 1.67428I$	$-5.23124 - 0.62784I$	$-5.27518 - 0.19626I$
$b = -0.380408 - 0.491558I$		
$u = 0.727640 - 0.146538I$		
$a = 0.66217 + 1.95900I$	$6.16667 + 0.45837I$	$4.93396 + 0.07525I$
$b = -0.727640 + 0.146538I$		
$u = 0.727640 + 0.146538I$		
$a = 0.66217 - 1.95900I$	$6.16667 - 0.45837I$	$4.93396 - 0.07525I$
$b = -0.727640 - 0.146538I$		
$u = 1.22083 - 0.93479I$		
$a = 0.676610 - 0.110678I$	$7.70444 - 5.09459I$	$1.80827 + 6.72626I$
$b = -1.22083 + 0.93479I$		
$u = 1.22083 + 0.93479I$		
$a = 0.676610 + 0.110678I$	$7.70444 + 5.09459I$	$1.80827 - 6.72626I$
$b = -1.22083 - 0.93479I$		

II.

$$I_2^u = \langle u^{17} + u^{16} + \dots + u - 1, b - u, 32825u^{16} + 78351u^{15} + \dots + 149349a - 108694 \rangle$$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.219787u^{16} - 0.524617u^{15} + \dots - 1.20532u + 0.727785 \\ u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.304830u^{16} - 0.385165u^{15} + \dots + 0.947572u + 0.780213 \\ u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.139452u^{16} - 0.00771348u^{15} + \dots - 1.29037u + 1.03261 \\ -0.0803353u^{16} - 0.516903u^{15} + \dots + 1.08504u - 0.304830 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.428901u^{16} - 0.662174u^{15} + \dots + 2.72758u - 0.746138 \\ -0.537426u^{16} - 0.452303u^{15} + \dots + 0.266865u - 0.452979 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.567001u^{16} - 0.839992u^{15} + \dots - 3.95640u - 0.655438 \\ 0.301442u^{16} + 0.253514u^{15} + \dots + 0.322225u - 0.773899 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.219787u^{16} - 0.524617u^{15} + \dots - 1.20532u + 0.727785 \\ -0.0803353u^{16} - 0.516903u^{15} + \dots + 1.08504u - 0.304830 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.420157u^{16} - 0.000415135u^{15} + \dots + 1.16377u - 0.0254438 \\ -0.544229u^{16} - 0.276594u^{15} + \dots + 0.616234u - 0.500907 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.993686u^{16} - 0.997074u^{15} + \dots - 0.654320u + 0.276112 \\ 0.245726u^{16} - 0.325151u^{15} + \dots + 0.772131u - 0.412490 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.993686u^{16} - 0.997074u^{15} + \dots - 0.654320u + 0.276112 \\ 0.245726u^{16} - 0.325151u^{15} + \dots + 0.772131u - 0.412490 \end{pmatrix}$$

(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
$u = -1.27568 - 1.06823I$		
$a = 0.869544 + 0.210846I$	$-0.71290 + 13.72756I$	$-3.72416 - 7.05259I$
$b = -1.27568 - 1.06823I$		
$u = -1.27568 + 1.06823I$		
$a = 0.869544 - 0.210846I$	$-0.71290 - 13.72756I$	$-3.72416 + 7.05259I$
$b = -1.27568 + 1.06823I$		
$u = -1.008911 - 0.431442I$		
$a = 0.889354 - 0.979858I$	$1.14436 + 6.14847I$	$-1.51565 - 5.18000I$
$b = -1.008911 - 0.431442I$		
$u = -1.008911 + 0.431442I$		
$a = 0.889354 + 0.979858I$	$1.14436 - 6.14847I$	$-1.51565 + 5.18000I$
$b = -1.008911 + 0.431442I$		
$u = -0.736595 - 0.759560I$		
$a = 0.631113 + 0.062721I$	$-0.05757 + 2.36290I$	$-6.52154 - 3.94257I$
$b = -0.736595 - 0.759560I$		
$u = -0.736595 + 0.759560I$		
$a = 0.631113 - 0.062721I$	$-0.05757 - 2.36290I$	$-6.52154 + 3.94257I$
$b = -0.736595 + 0.759560I$		
$u = -0.534388 - 0.570811I$		
$a = 2.28268 + 0.49285I$	$-5.66005 + 1.97491I$	$-5.96248 - 6.00520I$
$b = -0.534388 - 0.570811I$		
$u = -0.534388 + 0.570811I$		
$a = 2.28268 - 0.49285I$	$-5.66005 - 1.97491I$	$-5.96248 + 6.00520I$
$b = -0.534388 + 0.570811I$		
$u = 0.175989 - 0.585685I$		
$a = -0.864699 + 0.113620I$	$-0.850953 + 0.696665I$	$-8.07292 - 4.89884I$
$b = 0.175989 - 0.585685I$		
$u = 0.175989 + 0.585685I$		
$a = -0.864699 - 0.113620I$	$-0.850953 - 0.696665I$	$-8.07292 + 4.89884I$
$b = 0.175989 + 0.585685I$		

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.482184 - 0.448786I$	$5.38217 - 1.40715I$	$-2.06078 + 4.92367I$
$a = 1.16928 - 1.33243I$		
$b = 0.482184 - 0.448786I$		
$u = 0.482184 + 0.448786I$	$5.38217 + 1.40715I$	$-2.06078 - 4.92367I$
$a = 1.16928 + 1.33243I$		
$b = 0.482184 + 0.448786I$		
$u = 0.700751$	-3.84845	2.74049
$a = -2.48391$		
$b = 0.700751$		
$u = 0.902645 - 0.958889I$	$-6.98471 - 8.59095I$	$-7.08514 + 6.35872I$
$a = -1.194587 + 0.162669I$		
$b = 0.902645 - 0.958889I$		
$u = 0.902645 + 0.958889I$	$-6.98471 + 8.59095I$	$-7.08514 - 6.35872I$
$a = -1.194587 - 0.162669I$		
$b = 0.902645 + 0.958889I$		
$u = 1.14438 - 0.95543I$	$7.19647 - 4.49345I$	$-5.42758 - 0.47721I$
$a = -0.540728 + 0.095251I$		
$b = 1.14438 - 0.95543I$		
$u = 1.14438 + 0.95543I$	$7.19647 + 4.49345I$	$-5.42758 + 0.47721I$
$a = -0.540728 - 0.095251I$		
$b = 1.14438 + 0.95543I$		

$$\text{III. } I_3^u = \langle u^{24} + 3u^{23} + \dots + 46u + 11, 6.46 \times 10^{27} u^{23} + 1.62 \times 10^{28} u^{22} + \dots + 5.14 \times 10^{28} u + 1.37 \times 10^{29}, 1.70 \times 10^{30} u^{23} + 4.57 \times 10^{30} u^{22} + \dots + 8.77 \times 10^{30} u + 5.47 \times 10^{31} \rangle$$

(i) Arc colorings

$$\begin{aligned} a_2 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -0.125711u^{23} - 0.314966u^{22} + \dots - 7.79270u - 2.66581 \\ -0.194014u^{23} - 0.521280u^{22} + \dots - 10.4641u - 6.23750 \end{pmatrix} \\ a_1 &= \begin{pmatrix} -0.112914u^{23} - 0.342004u^{22} + \dots - 3.87208u - 5.91893 \\ 0.349626u^{23} + 0.876475u^{22} + \dots + 20.0575u + 7.59087 \end{pmatrix} \\ a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_5 &= \begin{pmatrix} -u \\ u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -0.0944925u^{23} - 0.240199u^{22} + \dots - 5.65490u - 1.31357 \\ -0.225233u^{23} - 0.596047u^{22} + \dots - 12.6019u - 7.58973 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 0.199834u^{23} + 0.549080u^{22} + \dots + 7.43775u + 6.55338 \\ -0.188172u^{23} - 0.468425u^{22} + \dots - 11.4459u - 3.10619 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0.190071u^{23} + 0.496722u^{22} + \dots + 10.2408u + 5.16485 \\ 0.0504074u^{23} + 0.147452u^{22} + \dots + 1.64431u + 3.00383 \end{pmatrix} \\ a_8 &= \begin{pmatrix} -0.125711u^{23} - 0.314966u^{22} + \dots - 7.79270u - 2.66581 \\ -0.216228u^{23} - 0.569424u^{22} + \dots - 11.9410u - 6.92134 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -0.174159u^{23} - 0.480733u^{22} + \dots - 7.83013u - 8.01539 \\ 0.385185u^{23} + 0.959297u^{22} + \dots + 21.4450u + 7.16754 \end{pmatrix} \\ a_7 &= \begin{pmatrix} 0.350336u^{23} + 0.981890u^{22} + \dots + 14.8192u + 13.5624 \\ -0.503421u^{23} - 1.24899u^{22} + \dots - 32.5135u - 9.02008 \end{pmatrix} \\ a_7 &= \begin{pmatrix} 0.350336u^{23} + 0.981890u^{22} + \dots + 14.8192u + 13.5624 \\ -0.503421u^{23} - 1.24899u^{22} + \dots - 32.5135u - 9.02008 \end{pmatrix} \end{aligned}$$

(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
$u = -1.72582 - 0.12950I$		
$a = 0.171564 - 0.430263I$	$-2.12168 + 1.41302I$	$-6.31698 + 1.92930I$
$b = -0.238976 + 1.192723I$		
$u = -1.72582 + 0.12950I$		
$a = 0.171564 + 0.430263I$	$-2.12168 - 1.41302I$	$-6.31698 - 1.92930I$
$b = -0.238976 - 1.192723I$		
$u = -0.99828 - 1.87172I$		
$a = -0.221577 - 0.306137I$	$-2.12168 - 4.24323I$	$-6.31698 + 7.88819I$
$b = -0.369838 + 0.105617I$		
$u = -0.99828 + 1.87172I$		
$a = -0.221577 + 0.306137I$	$-2.12168 + 4.24323I$	$-6.31698 - 7.88819I$
$b = -0.369838 - 0.105617I$		
$u = -0.951037 - 0.715358I$		
$a = -1.032335 - 0.181700I$	$0.74248 + 3.16396I$	$-9.19277 - 2.56480I$
$b = 0.649666 + 0.469539I$		
$u = -0.951037 + 0.715358I$		
$a = -1.032335 + 0.181700I$	$0.74248 - 3.16396I$	$-9.19277 + 2.56480I$
$b = 0.649666 - 0.469539I$		
$u = -0.939501 - 0.901901I$		
$a = -0.956419 - 0.051833I$	$4.88007 + 5.99209I$	$-2.66351 - 5.54425I$
$b = 1.53236 + 0.89026I$		
$u = -0.939501 + 0.901901I$		
$a = -0.956419 + 0.051833I$	$4.88007 - 5.99209I$	$-2.66351 + 5.54425I$
$b = 1.53236 - 0.89026I$		
$u = -0.726600 - 0.525022I$		
$a = -0.174808 + 1.380498I$	$4.88007 - 0.33584I$	$-2.66351 - 0.41465I$
$b = 0.834345 - 0.058079I$		
$u = -0.726600 + 0.525022I$		
$a = -0.174808 - 1.380498I$	$4.88007 + 0.33584I$	$-2.66351 + 0.41465I$
$b = 0.834345 + 0.058079I$		

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.369838 - 0.105617I$ $a = 1.39380 + 1.54969I$ $b = -0.99828 + 1.87172I$	$-2.12168 + 4.24323I$	$-6.31698 - 7.88819I$
$u = -0.369838 + 0.105617I$ $a = 1.39380 - 1.54969I$ $b = -0.99828 - 1.87172I$	$-2.12168 - 4.24323I$	$-6.31698 + 7.88819I$
$u = -0.238976 - 1.192723I$ $a = 0.637456 - 0.167240I$ $b = -1.72582 + 0.12950I$	$-2.12168 - 1.41302I$	$-6.31698 - 1.92930I$
$u = -0.238976 + 1.192723I$ $a = 0.637456 + 0.167240I$ $b = -1.72582 - 0.12950I$	$-2.12168 + 1.41302I$	$-6.31698 + 1.92930I$
$u = 0.168821 - 0.703789I$ $a = -1.081214 - 0.240521I$ $b = 1.26487 + 1.00614I$	$-6.25926 - 1.41510I$	$-12.84625 + 4.90874I$
$u = 0.168821 + 0.703789I$ $a = -1.081214 + 0.240521I$ $b = 1.26487 - 1.00614I$	$-6.25926 + 1.41510I$	$-12.84625 - 4.90874I$
$u = 0.649666 - 0.469539I$ $a = 1.52720 - 0.29894I$ $b = -0.951037 + 0.715358I$	$0.74248 - 3.16396I$	$-9.19277 + 2.56480I$
$u = 0.649666 + 0.469539I$ $a = 1.52720 + 0.29894I$ $b = -0.951037 - 0.715358I$	$0.74248 + 3.16396I$	$-9.19277 - 2.56480I$
$u = 0.834345 - 0.058079I$ $a = 1.09167 - 1.01623I$ $b = -0.726600 - 0.525022I$	$4.88007 - 0.33584I$	$-2.66351 - 0.41465I$
$u = 0.834345 + 0.058079I$ $a = 1.09167 + 1.01623I$ $b = -0.726600 + 0.525022I$	$4.88007 + 0.33584I$	$-2.66351 + 0.41465I$

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.26487 - 1.00614I$	$-6.25926 + 1.41510I$	$-12.84625 - 4.90874I$
$a = 0.107103 - 0.484305I$		
$b = 0.168821 + 0.703789I$		
$u = 1.26487 + 1.00614I$	$-6.25926 - 1.41510I$	$-12.84625 + 4.90874I$
$a = 0.107103 + 0.484305I$		
$b = 0.168821 - 0.703789I$		
$u = 1.53236 - 0.89026I$	$4.88007 - 5.99209I$	$-2.66351 + 5.54425I$
$a = 0.673917 - 0.203172I$		
$b = -0.939501 + 0.901901I$		
$u = 1.53236 + 0.89026I$	$4.88007 + 5.99209I$	$-2.66351 - 5.54425I$
$a = 0.673917 + 0.203172I$		
$b = -0.939501 - 0.901901I$		

IV. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1, c_5	$(u^{10} + u^9 - u^8 - u^7 + 5u^6 + 3u^5 - 3u^4 - u^3 + 3u^2 + 3u + 1)$ $(u^{17} + u^{16} + \dots + u - 1)(u^{24} + 3u^{23} + \dots + 46u + 11)$
c_2	$(u^{10} - 2u^8 + 4u^6 + 2u^5 + 4u^4 + 5u^3 + 2u^2 + 2u + 5)$ $(u^{17} - 2u^{15} + \dots - u + 2)(u^{24} + u^{23} + \dots + 178u + 59)$
c_3	$(1 - 2u + u^2 + 3u^3 + u^4)^6(u^{10} + 7u^9 + \dots + 8u + 5)$ $(u^{17} - 14u^{16} + \dots - 32u - 64)$
c_4	$(u^3 - u^2 + 2u - 1)^8(u^{10} + 6u^8 - u^7 + 12u^6 - 3u^5 + 8u^4 - u^3 + 2u + 1)$ $(u^{17} + 9u^{16} + \dots + 144u + 16)$
c_6, c_{11}	$(u^{10} - u^9 - 3u^8 + 4u^7 - u^5 + 4u^4 - 3u^3 + 4u^2 - u + 1)$ $(u^{17} + u^{16} + \dots + u + 1)(u^{24} - u^{23} + \dots - 568u + 89)$
c_7	$(u^{10} + u^9 - 3u^8 - 4u^7 + u^5 + 4u^4 + 3u^3 + 4u^2 + u + 1)$ $(u^{17} + u^{16} + \dots + u + 1)(u^{24} - u^{23} + \dots - 568u + 89)$
c_8	$(u^4 - u^3 + u^2 + 1)^6$ $(u^{10} - 3u^9 + 6u^8 - 6u^7 + 6u^6 - 6u^5 + 9u^4 - 6u^3 + 3u^2 + 1)$ $(u^{17} + 12u^{16} + \dots + 64u + 8)$
c_9, c_{10}	$(u^3 - u^2 + 2u - 1)^8(u^{10} + 6u^8 + u^7 + 12u^6 + 3u^5 + 8u^4 + u^3 - 2u + 1)$ $(u^{17} + 9u^{16} + \dots + 144u + 16)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1, c_5	$(y^{10} - 3y^9 + 13y^8 - 23y^7 + 45y^6 - 51y^5 + 49y^4 - 27y^3 + 9y^2 - 3y + 1)$ $(y^{17} - 3y^{16} + \dots - y - 1)(y^{24} - 5y^{23} + \dots - 1544y + 121)$
c_2	$(y^{10} - 4y^9 + 12y^8 - 8y^7 + 4y^6 + 30y^5 - 8y^4 + 23y^3 + 24y^2 + 16y + 25)$ $(y^{17} - 4y^{16} + \dots + 29y - 4)(y^{24} - 9y^{23} + \dots - 77232y + 3481)$
c_3	$(1 - 2y + 15y^2 - 7y^3 + y^4)^6(y^{10} - 7y^9 + \dots + 246y + 25)$ $(y^{17} - 14y^{16} + \dots + 50688y - 4096)$
c_4, c_9, c_{10}	$(y^3 + 3y^2 + 2y - 1)^8(y^{10} + 12y^9 + \dots - 4y + 1)$ $(y^{17} + 15y^{16} + \dots - 128y - 256)$
c_6, c_7, c_{11}	$(y^{10} - 7y^9 + 17y^8 - 10y^7 - 14y^6 - y^5 + 12y^4 + 21y^3 + 18y^2 + 7y + 1)$ $(y^{17} - 23y^{16} + \dots + 9y - 1)(y^{24} - 21y^{23} + \dots - 204788y + 7921)$
c_8	$(1 + 2y + 3y^2 + y^3 + y^4)^6(y^{10} + 3y^9 + \dots + 6y + 1)$ $(y^{17} + 4y^{16} + \dots - 608y - 64)$