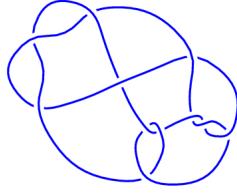
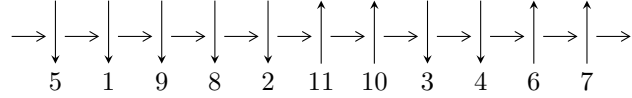


11a₁₃₉ (K11a₁₃₉)

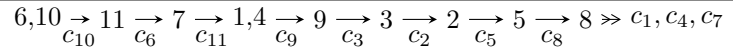


1

Arc Sequences



Solving Sequence



Representation Ideals

$$I = \bigcap_{i=1}^4 I_i^u$$

$$I_1^u = \langle u - 1, b, a - 1 \rangle$$

$$I_2^u = \langle u^2 - 2u - 1, b - u + 1, a + u - 2 \rangle$$

$$I_3^u = \langle u^{15} - 4u^{14} + \dots + 171u - 29, \\ - 1.60184 \times 10^{23}u^{14} + 6.20350 \times 10^{23}u^{13} + \dots + 3.65598 \times 10^{25}b - 2.12105 \times 10^{25}, \\ - 4.72777 \times 10^{27}u^{14} + 1.87082 \times 10^{28}u^{13} + \dots + 1.02843 \times 10^{29}a - 4.79355 \times 10^{29} \rangle$$

$$I_4^u = \langle u^{37} + 27u^{35} + \dots + 821u - 181, \\ - 7.39861 \times 10^{142}u^{36} - 3.45916 \times 10^{142}u^{35} + \dots + 7.62103 \times 10^{145}b - 9.48194 \times 10^{145}, \\ 3.49274 \times 10^{143}u^{36} + 2.72263 \times 10^{144}u^{35} + \dots + 1.37941 \times 10^{148}a - 3.15215 \times 10^{148} \rangle$$

There are 4 irreducible components with 55 representations.

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

$$\text{I. } I_1^u = \langle u - 1, b, a - 1 \rangle$$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

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

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

(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
$u =$	1.00000		
$a =$	1.00000	0	0
$b =$	0		

$$\text{II. } I_2^u = \langle u^2 - 2u - 1, b - u + 1, a + u - 2 \rangle$$

(i) Arc colorings

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

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

$$a_{11} = \begin{pmatrix} -u + 2 \\ 2u - 1 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u + 2 \\ -2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u + 2 \\ u - 2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u - 2 \\ 2 \end{pmatrix}$$

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

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

(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
$u = -0.414214$ $a = 2.41421$ $b = -1.41421$	-4.93480	-8.00000
$u = 2.41421$ $a = -0.414214$ $b = 1.41421$	-4.93480	-8.00000

$$\text{III. } I_3^u = \langle u^{15} - 4u^{14} + \dots + 171u - 29, -1.60 \times 10^{23}u^{14} + 6.20 \times 10^{23}u^{13} + \dots + 3.66 \times 10^{25}b - 2.12 \times 10^{25}, -4.73 \times 10^{27}u^{14} + 1.87 \times 10^{28}u^{13} + \dots + 1.03 \times 10^{29}a - 4.79 \times 10^{29} \rangle$$

(i) Arc colorings

$$\begin{aligned} a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 0.0459708u^{14} - 0.181911u^{13} + \dots - 48.2084u + 4.66105 \\ 0.00438141u^{14} - 0.0169681u^{13} + \dots - 3.86359u + 0.580158 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0.0459708u^{14} - 0.181911u^{13} + \dots - 48.2084u + 4.66105 \\ 0.00522584u^{14} - 0.0202284u^{13} + \dots - 4.85951u + 0.522967 \end{pmatrix} \\ a_7 &= \begin{pmatrix} 0.0508486u^{14} - 0.197723u^{13} + \dots - 51.8653u + 2.37942 \\ 0.00509367u^{14} - 0.0200007u^{13} + \dots - 4.43324u + 0.317925 \end{pmatrix} \\ a_1 &= \begin{pmatrix} -0.00232286u^{14} + 0.00268349u^{13} + \dots + 1.13282u + 5.39353 \\ 0.000730947u^{14} - 0.00299444u^{13} + \dots - 0.382672u + 0.442544 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 0.0503522u^{14} - 0.198879u^{13} + \dots - 52.0719u + 5.24120 \\ 0.00438141u^{14} - 0.0169681u^{13} + \dots - 3.86359u + 0.580158 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -0.0191935u^{14} + 0.0715836u^{13} + \dots + 19.8118u + 3.13262 \\ -0.00255952u^{14} + 0.00957813u^{13} + \dots + 2.34135u + 0.0486478 \end{pmatrix} \\ a_2 &= \begin{pmatrix} -0.0459708u^{14} + 0.181911u^{13} + \dots + 48.2084u - 4.66105 \\ -0.00522584u^{14} + 0.0202284u^{13} + \dots + 4.85951u - 0.522967 \end{pmatrix} \\ a_5 &= \begin{pmatrix} 0.0508486u^{14} - 0.197723u^{13} + \dots - 51.8653u + 2.37942 \\ 0.00509367u^{14} - 0.0200007u^{13} + \dots - 4.43324u + 0.317925 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.0629091u^{14} - 0.251158u^{13} + \dots - 64.4370u + 9.23803 \\ 0.00476068u^{14} - 0.0191559u^{13} + \dots - 4.01904u + 0.853777 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.0629091u^{14} - 0.251158u^{13} + \dots - 64.4370u + 9.23803 \\ 0.00476068u^{14} - 0.0191559u^{13} + \dots - 4.01904u + 0.853777 \end{pmatrix} \end{aligned}$$

(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
$u = -1.65061 - 1.16067I$		
$a = 0.588697 - 0.128960I$	$-5.87256 - 4.40083I$	$-6.74431 + 3.49859I$
$b = -1.41878 - 0.21917I$		
$u = -1.65061 + 1.16067I$		
$a = 0.588697 + 0.128960I$	$-5.87256 + 4.40083I$	$-6.74431 - 3.49859I$
$b = -1.41878 + 0.21917I$		
$u = -0.202767 - 0.566026I$		
$a = -1.067211 - 0.103255I$	$-0.32910 + 1.53058I$	$-2.51511 - 4.43065I$
$b = 0.309916 - 0.549911I$		
$u = -0.202767 + 0.566026I$		
$a = -1.067211 + 0.103255I$	$-0.32910 - 1.53058I$	$-2.51511 + 4.43065I$
$b = 0.309916 + 0.549911I$		
$u = 0.080462 - 0.147245I$		
$a = 1.02896 + 6.58063I$	$-0.32910 - 1.53058I$	$-2.51511 + 4.43065I$
$b = 0.309916 + 0.549911I$		
$u = 0.080462 + 0.147245I$		
$a = 1.02896 - 6.58063I$	$-0.32910 + 1.53058I$	$-2.51511 - 4.43065I$
$b = 0.309916 - 0.549911I$		
$u = 0.32269 - 2.32614I$		
$a = 0.320591 - 0.114165I$	$-5.87256 + 4.40083I$	$-6.74431 - 3.49859I$
$b = -1.41878 + 0.21917I$		
$u = 0.32269 + 2.32614I$		
$a = 0.320591 + 0.114165I$	$-5.87256 - 4.40083I$	$-6.74431 + 3.49859I$
$b = -1.41878 - 0.21917I$		
$u = 0.599092 - 1.112210I$		
$a = -0.552518 - 0.271964I$	-2.40108	-3.48114
$b = 1.21774$		
$u = 0.599092 + 1.112210I$		
$a = -0.552518 + 0.271964I$	-2.40108	-3.48114
$b = 1.21774$		

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.86251 - 3.35310I$		
$a = 0.179670 + 0.336565I$	$-5.87256 - 4.40083I$	$-6.74431 + 3.49859I$
$b = -1.41878 - 0.21917I$		
$u = 0.86251 + 3.35310I$		
$a = 0.179670 - 0.336565I$	$-5.87256 + 4.40083I$	$-6.74431 - 3.49859I$
$b = -1.41878 + 0.21917I$		
$u = 0.99969 - 1.53428I$		
$a = -0.473648 - 0.479834I$	$-0.32910 - 1.53058I$	$-2.51511 + 4.43065I$
$b = 0.309916 + 0.549911I$		
$u = 0.99969 + 1.53428I$		
$a = -0.473648 + 0.479834I$	$-0.32910 + 1.53058I$	$-2.51511 - 4.43065I$
$b = 0.309916 - 0.549911I$		
$u = 1.97786$		
$a = 0.640581$	-2.40108	-3.48114
$b = 1.21774$		

$$\text{IV. } I_4^u = \langle u^{37} + 27u^{35} + \dots + 821u - 181, -7.40 \times 10^{142}u^{36} - 3.46 \times 10^{142}u^{35} + \dots + 7.62 \times 10^{145}b - 9.48 \times 10^{145}, 3.49 \times 10^{143}u^{36} + 2.72 \times 10^{144}u^{35} + \dots + 1.38 \times 10^{148}a - 3.15 \times 10^{148} \rangle$$

(i) Arc colorings

$$\begin{aligned} a_6 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -0.0000253206u^{36} - 0.000197377u^{35} + \dots + 25.0462u + 2.28515 \\ 0.000970816u^{36} + 0.000453897u^{35} + \dots + 2.39756u + 1.24418 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} -0.0000253206u^{36} - 0.000197377u^{35} + \dots + 25.0462u + 2.28515 \\ 0.00111285u^{36} + 0.000495133u^{35} + \dots + 2.24010u + 1.27991 \end{pmatrix} \\ a_7 &= \begin{pmatrix} -0.00757494u^{36} - 0.00110684u^{35} + \dots + 12.2850u - 2.06244 \\ 0.00207992u^{36} + 0.000722730u^{35} + \dots + 3.94114u + 2.52536 \end{pmatrix} \\ a_1 &= \begin{pmatrix} 0.0177804u^{36} + 0.00272863u^{35} + \dots + 32.2623u + 12.4128 \\ -0.00218843u^{36} - 0.000521459u^{35} + \dots - 2.62444u - 2.97094 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 0.000945495u^{36} + 0.000256520u^{35} + \dots + 27.4437u + 3.52933 \\ 0.000970816u^{36} + 0.000453897u^{35} + \dots + 2.39756u + 1.24418 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -0.0107299u^{36} - 0.00157860u^{35} + \dots + 3.63647u - 9.77673 \\ 0.00211555u^{36} + 0.000234871u^{35} + \dots + 0.915590u + 2.24818 \end{pmatrix} \\ a_2 &= \begin{pmatrix} -0.0198917u^{36} - 0.00154104u^{35} + \dots - 26.3230u - 14.2611 \\ 0.00136801u^{36} + 0.000325826u^{35} + \dots + 2.37815u + 1.83531 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -0.0133051u^{36} - 0.00176885u^{35} + \dots - 29.3355u - 14.0388 \\ 0.000903335u^{36} + 0.0000939390u^{35} + \dots + 6.29323u + 0.157733 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.0168457u^{36} + 0.00362032u^{35} + \dots + 58.0165u + 19.5369 \\ -0.000706183u^{36} + 0.000122226u^{35} + \dots + 0.118682u - 0.901070 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.0168457u^{36} + 0.00362032u^{35} + \dots + 58.0165u + 19.5369 \\ -0.000706183u^{36} + 0.000122226u^{35} + \dots + 0.118682u - 0.901070 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -2.02192 - 0.78475I$		
$a = 0.589273 - 0.078619I$	$-6.13830 + 3.19514I$	$-6.64446 - 4.28023I$
$b = -1.50696 - 0.14580I$		
$u = -2.02192 + 0.78475I$		
$a = 0.589273 + 0.078619I$	$-6.13830 - 3.19514I$	$-6.64446 + 4.28023I$
$b = -1.50696 + 0.14580I$		
$u = -1.15091 - 2.87530I$		
$a = -0.262880 + 0.368182I$	$-1.06880 + 8.43099I$	$-2.35826 - 5.07593I$
$b = 1.42215 - 0.27413I$		
$u = -1.15091 + 2.87530I$		
$a = -0.262880 - 0.368182I$	$-1.06880 - 8.43099I$	$-2.35826 + 5.07593I$
$b = 1.42215 + 0.27413I$		
$u = -0.86254 - 1.19294I$		
$a = 0.687188 - 0.635521I$	$4.43467 + 4.86040I$	$2.20180 - 4.57417I$
$b = -0.298795 + 0.708164I$		
$u = -0.86254 + 1.19294I$		
$a = 0.687188 + 0.635521I$	$4.43467 - 4.86040I$	$2.20180 + 4.57417I$
$b = -0.298795 - 0.708164I$		
$u = -0.73206 - 2.38146I$		
$a = -0.282854 - 0.096204I$	$-9.93818 - 0.58603I$	$-11.65035 - 0.12880I$
$b = 1.46105 + 0.17922I$		
$u = -0.73206 + 2.38146I$		
$a = -0.282854 + 0.096204I$	$-9.93818 + 0.58603I$	$-11.65035 + 0.12880I$
$b = 1.46105 - 0.17922I$		
$u = -0.37463 - 1.62141I$		
$a = -0.270546 + 0.812182I$	$3.18948 + 6.36871I$	$-0.94392 - 6.27419I$
$b = 1.241450 - 0.301482I$		
$u = -0.37463 + 1.62141I$		
$a = -0.270546 - 0.812182I$	$3.18948 - 6.36871I$	$-0.94392 + 6.27419I$
$b = 1.241450 + 0.301482I$		

Solution to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.30560 - 1.58028I$		
$a = 0.421114 - 0.216981I$	$-2.94289 + 4.00123I$	$-5.31382 - 7.13651I$
$b = -1.246269 + 0.157359I$		
$u = -0.30560 + 1.58028I$		
$a = 0.421114 + 0.216981I$	$-2.94289 - 4.00123I$	$-5.31382 + 7.13651I$
$b = -1.246269 - 0.157359I$		
$u = -0.25393 - 2.58489I$		
$a = -0.330965 - 0.089962I$	$-8.84281 - 9.20717I$	$-9.51764 + 6.62975I$
$b = 1.44476 + 0.25332I$		
$u = -0.25393 + 2.58489I$		
$a = -0.330965 + 0.089962I$	$-8.84281 + 9.20717I$	$-9.51764 - 6.62975I$
$b = 1.44476 - 0.25332I$		
$u = -0.226239 - 0.182053I$		
$a = -4.21937 + 2.07658I$	$0.86122 + 5.58916I$	$-2.81742 - 3.15563I$
$b = 0.634847 + 0.552185I$		
$u = -0.226239 + 0.182053I$		
$a = -4.21937 - 2.07658I$	$0.86122 - 5.58916I$	$-2.81742 + 3.15563I$
$b = 0.634847 - 0.552185I$		
$u = -0.180753 - 0.158876I$		
$a = -2.80375 + 0.38801I$	$0.89372 + 1.45212I$	$2.19487 - 5.36999I$
$b = 0.024045 - 0.524949I$		
$u = -0.180753 + 0.158876I$		
$a = -2.80375 - 0.38801I$	$0.89372 - 1.45212I$	$2.19487 + 5.36999I$
$b = 0.024045 + 0.524949I$		
$u = -0.176144 - 1.158326I$		
$a = 0.225320 - 1.184453I$	$7.20025 + 2.58398I$	$4.12642 - 3.46228I$
$b = -0.056652 + 0.742586I$		
$u = -0.176144 + 1.158326I$		
$a = 0.225320 + 1.184453I$	$7.20025 - 2.58398I$	$4.12642 + 3.46228I$
$b = -0.056652 - 0.742586I$		

Solution to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.050031 - 0.880421I$ $a = 0.797040 - 0.158775I$ $b = -0.504461 - 0.513546I$	$-3.65380 + 1.92705I$	$-8.13048 - 0.55620I$
$u = 0.050031 + 0.880421I$ $a = 0.797040 + 0.158775I$ $b = -0.504461 + 0.513546I$	$-3.65380 - 1.92705I$	$-8.13048 + 0.55620I$
$u = 0.066933 - 0.977115I$ $a = 0.14388 + 1.42354I$ $b = -1.120484 - 0.271884I$	$3.96621 - 1.16950I$	$0.510548 + 0.635467I$
$u = 0.066933 + 0.977115I$ $a = 0.14388 - 1.42354I$ $b = -1.120484 + 0.271884I$	$3.96621 + 1.16950I$	$0.510548 - 0.635467I$
$u = 0.163096 - 0.011652I$ $a = 7.98653 - 0.51584I$ $b = -0.664407 + 0.380355I$	$3.08964 - 0.95760I$	$0.164246 - 1.305195I$
$u = 0.163096 + 0.011652I$ $a = 7.98653 + 0.51584I$ $b = -0.664407 - 0.380355I$	$3.08964 + 0.95760I$	$0.164246 + 1.305195I$
$u = 0.391976 - 0.692040I$ $a = 0.987339 - 0.320404I$ $b = -0.363827 - 0.666297I$	$-3.03568 - 5.84417I$	$-5.83954 + 7.10655I$
$u = 0.391976 + 0.692040I$ $a = 0.987339 + 0.320404I$ $b = -0.363827 + 0.666297I$	$-3.03568 + 5.84417I$	$-5.83954 - 7.10655I$
$u = 0.605451$ $a = -0.499183$ $b = 0.385110$	-1.08012	-10.9507
$u = 1.01087 - 1.10647I$ $a = -0.784263 - 0.518933I$ $b = 0.367270 + 0.741207I$	$1.80064 - 9.99903I$	$-1.43276 + 8.15131I$

Solution to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.01087 + 1.10647I$ $a = -0.784263 + 0.518933I$ $b = 0.367270 - 0.741207I$	$1.80064 + 9.99903I$	$-1.43276 - 8.15131I$
$u = 1.06720$ $a = -0.0911804$ $b = -1.39663$	-6.54639	-13.9604
$u = 1.43052 - 0.76176I$ $a = -0.642350 - 0.124040I$ $b = 1.390611 - 0.120997I$	$-3.23840 + 0.33679I$	$-3.19033 + 0.85162I$
$u = 1.43052 + 0.76176I$ $a = -0.642350 + 0.124040I$ $b = 1.390611 + 0.120997I$	$-3.23840 - 0.33679I$	$-3.19033 - 0.85162I$
$u = 1.43867 - 2.93108I$ $a = 0.289934 + 0.325272I$ $b = -1.45551 - 0.28365I$	$-4.0535 - 13.7305I$	$-5.44783 + 8.23789I$
$u = 1.43867 + 2.93108I$ $a = 0.289934 - 0.325272I$ $b = -1.45551 + 0.28365I$	$-4.0535 + 13.7305I$	$-5.44783 - 8.23789I$
$u = 1.79258$ $a = -0.642187$ $b = 1.47388$	-3.47854	-0.910986

V. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1	$(u-1)(u+1)^2(u^{15}-5u^{13}+\dots-u-1)(u^{37}+2u^{36}+\dots+u+1)$
c_2	$(u+1)^3(u^{15}+10u^{14}+\dots-u+1)(u^{37}+18u^{36}+\dots+5u+1)$
c_3, c_8, c_9	$(u)(u^2-2)(-1+u-u^2-2u^3+u^4+u^5)^3(u^{37}-2u^{36}+\dots-2u^2+2)$
c_4	$(u)(u^2-2)(-1-u+u^2+4u^3+3u^4+u^5)^3(u^{37}-6u^{36}+\dots+288u-128)$
c_5	$(u-1)^2(u+1)(u^{15}-5u^{13}+\dots-u-1)(u^{37}+2u^{36}+\dots+u+1)$
c_6	$(u-1)^2(u+1)(u^{15}-5u^{13}+\dots-u+1)(u^{37}+2u^{36}+\dots+13u-1)$
c_7	$u^3(1+u+u^2+2u^3+u^4+u^5)^3(u^{37}+6u^{36}+\dots-224u-16)$
c_{10}, c_{11}	$(u-1)(u+1)^2(u^{15}-5u^{13}+\dots-u+1)(u^{37}+2u^{36}+\dots+13u-1)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1	$(y-1)^3(y^{15} - 10y^{14} + \dots - y - 1)(y^{37} - 18y^{36} + \dots + 5y - 1)$
c_2	$(y-1)^3(y^{15} - 10y^{14} + \dots + 7y - 1)(y^{37} + 6y^{36} + \dots + 21y - 1)$
c_3	$(y)(y-2)^2(-1 - y - 3y^2 + 8y^3 - 5y^4 + y^5)^3(y^{37} - 34y^{36} + \dots + 8y - 4)$
c_4	$y(y-2)^2(y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)^3$ $(y^{37} - 10y^{36} + \dots + 156672y - 16384)$
c_5	$(y-1)^3(y^{15} - 10y^{14} + \dots - y - 1)(y^{37} - 18y^{36} + \dots + 5y - 1)$
c_6, c_{10}	$(y-1)^3(y^{15} - 10y^{14} + \dots - y - 1)(y^{37} - 34y^{36} + \dots + 117y - 1)$
c_7	$y^3(-1 - y + y^2 + 4y^3 + 3y^4 + y^5)^3(y^{37} + 18y^{36} + \dots + 32256y - 256)$
c_8	$(y)(y-2)^2(-1 - y - 3y^2 + 8y^3 - 5y^4 + y^5)^3(y^{37} - 34y^{36} + \dots + 8y - 4)$
c_9	$(y)(y-2)^2(-1 - y - 3y^2 + 8y^3 - 5y^4 + y^5)^3(y^{37} - 34y^{36} + \dots + 8y - 4)$
c_{11}	$(y-1)^3(y^{15} - 10y^{14} + \dots - y - 1)(y^{37} - 34y^{36} + \dots + 117y - 1)$