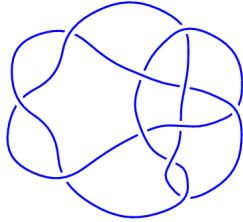
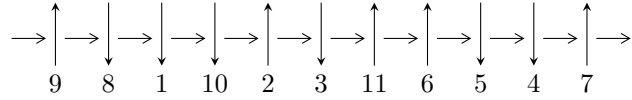


11a₂₇₀ (K11a₂₇₀)

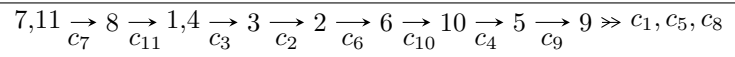


1

Arc Sequences



Solving Sequence



Representation Ideals

$$I = \bigcap_{i=1}^2 I_i^u$$

$$\begin{aligned} I_1^u &= \langle u^{17} + 3u^{16} + \dots + 266u - 11, \\ &\quad 2708661669829u^{16} + 4137980703858u^{15} + \dots + 3054788343628b - 6202138032785, \\ &\quad - 4155884256935u^{16} - 13797844114770u^{15} + \dots + 33602671779908a - 1048635269317105 \rangle \\ I_2^u &= \langle u^{85} - 4u^{84} + \dots + 22660u - 563, \\ &\quad 1.36692 \times 10^{623}u^{84} - 5.17987 \times 10^{623}u^{83} + \dots + 1.86216 \times 10^{626}b + 9.79072 \times 10^{625}, \\ &\quad - 1.56710 \times 10^{626}u^{84} + 5.60989 \times 10^{626}u^{83} + \dots + 1.04840 \times 10^{629}a - 2.04759 \times 10^{630} \rangle \end{aligned}$$

There are 2 irreducible components with 102 representations.

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

$$\mathbf{I. } I_1^u = \langle u^{17} + 3u^{16} + \dots + 266u - 11, 2.71 \times 10^{12}u^{16} + 4.14 \times 10^{12}u^{15} + \dots + 3.05 \times 10^{12}b - 6.20 \times 10^{12}, -4.16 \times 10^{12}u^{16} - 1.38 \times 10^{13}u^{15} + \dots + 3.36 \times 10^{13}a - 1.05 \times 10^{15} \rangle$$

(i) Arc colorings

$$\begin{aligned} a_7 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0.123677u^{16} + 0.410617u^{15} + \dots + 92.4769u + 31.2069 \\ -0.886694u^{16} - 1.35459u^{15} + \dots - 54.4476u + 2.03030 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.260461u^{16} + 0.628464u^{15} + \dots + 121.892u + 40.4183 \\ 0.342113u^{16} + 1.36964u^{15} + \dots + 117.299u - 5.07882 \end{pmatrix} \\ a_1 &= \begin{pmatrix} 0.123677u^{16} + 0.410617u^{15} + \dots + 92.4769u + 31.2069 \\ -0.736235u^{16} - 1.11650u^{15} + \dots - 45.2782u + 1.59486 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_3 &= \begin{pmatrix} 0.308793u^{16} + 0.678300u^{15} + \dots + 64.1210u + 10.3809 \\ 0.331771u^{16} - 0.986970u^{15} + \dots - 149.984u + 5.81706 \end{pmatrix} \\ a_2 &= \begin{pmatrix} 0.217062u^{16} + 0.567100u^{15} + \dots - 3.43015u - 25.5880 \\ -0.399185u^{16} - 0.956570u^{15} + \dots - 68.9806u + 3.01975 \end{pmatrix} \\ a_6 &= \begin{pmatrix} -0.291158u^{16} - 1.06179u^{15} + \dots - 74.7182u + 9.32097 \\ -1.28521u^{16} - 2.89802u^{15} + \dots - 178.303u + 7.34575 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -0.763017u^{16} - 0.943971u^{15} + \dots + 38.0293u + 33.2372 \\ -0.886694u^{16} - 1.35459u^{15} + \dots - 54.4476u + 2.03030 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -0.273510u^{16} - 1.06158u^{15} + \dots - 108.468u - 4.84076 \\ 0.188201u^{16} - 0.0185580u^{15} + \dots - 15.4828u + 0.675042 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 0.945215u^{16} + 1.70410u^{15} + \dots + 151.950u + 31.0906 \\ 1.58397u^{16} + 2.64468u^{15} + \dots + 120.727u - 5.41686 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 0.945215u^{16} + 1.70410u^{15} + \dots + 151.950u + 31.0906 \\ 1.58397u^{16} + 2.64468u^{15} + \dots + 120.727u - 5.41686 \end{pmatrix} \end{aligned}$$

(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
$u = -1.02672 - 1.18143I$		
$a = 0.513834 + 0.221152I$	$5.58457 + 1.36975I$	$7.85861 - 1.02572I$
$b = -0.17972 + 1.77828I$		
$u = -1.02672 + 1.18143I$		
$a = 0.513834 - 0.221152I$	$5.58457 - 1.36975I$	$7.85861 + 1.02572I$
$b = -0.17972 - 1.77828I$		
$u = -1.02324 - 1.18480I$		
$a = 0.252373 + 0.248471I$	$6.94718 - 5.08907I$	$1.93807 + 2.07497I$
$b = -0.11409 - 1.54017I$		
$u = -1.02324 + 1.18480I$		
$a = 0.252373 - 0.248471I$	$6.94718 + 5.08907I$	$1.93807 - 2.07497I$
$b = -0.11409 + 1.54017I$		
$u = -0.968709 - 1.022258I$		
$a = -0.351349 - 0.622654I$	$-1.66547 - 1.22003I$	$-7.34562 - 1.66081I$
$b = 0.122884 - 1.035143I$		
$u = -0.968709 + 1.022258I$		
$a = -0.351349 + 0.622654I$	$-1.66547 + 1.22003I$	$-7.34562 + 1.66081I$
$b = 0.122884 + 1.035143I$		
$u = -0.413964 - 1.147910I$		
$a = -1.039654 - 0.027010I$	$-2.43226 + 4.98909I$	$-3.85930 - 5.31412I$
$b = 0.544718 + 0.019746I$		
$u = -0.413964 + 1.147910I$		
$a = -1.039654 + 0.027010I$	$-2.43226 - 4.98909I$	$-3.85930 + 5.31412I$
$b = 0.544718 - 0.019746I$		
$u = -0.15058 - 1.47511I$		
$a = -0.758652 + 0.351484I$	$-2.32528 + 2.66972I$	$-3.07111 - 6.02917I$
$b = 0.252745 - 0.882675I$		
$u = -0.15058 + 1.47511I$		
$a = -0.758652 - 0.351484I$	$-2.32528 - 2.66972I$	$-3.07111 + 6.02917I$
$b = 0.252745 + 0.882675I$		

Solution to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.142796 - 0.736384I$ $a = 0.24905 - 1.57846I$ $b = -0.11076 + 1.47730I$	$7.65655 + 1.53651I$	$3.05438 - 1.89060I$
$u = -0.142796 + 0.736384I$ $a = 0.24905 + 1.57846I$ $b = -0.11076 - 1.47730I$	$7.65655 - 1.53651I$	$3.05438 + 1.89060I$
$u = 0.0371502$ $a = 34.9639$ $b = -0.295281$	2.34345	-34.4898
$u = 0.64861 - 1.56383I$ $a = 0.373311 - 0.139424I$ $b = -0.512954 + 0.294371I$	$0.44571 + 3.07804I$	$-4.36238 - 7.29027I$
$u = 0.64861 + 1.56383I$ $a = 0.373311 + 0.139424I$ $b = -0.512954 - 0.294371I$	$0.44571 - 3.07804I$	$-4.36238 + 7.29027I$
$u = 1.55882 - 1.50973I$ $a = -0.584506 + 0.284623I$ $b = 0.14482 + 1.45137I$	$2.71154 - 7.20938I$	$2.03223 + 7.85052I$
$u = 1.55882 + 1.50973I$ $a = -0.584506 - 0.284623I$ $b = 0.14482 - 1.45137I$	$2.71154 + 7.20938I$	$2.03223 - 7.85052I$

$$\text{II. } I_2^u = \langle u^{85} - 4u^{84} + \dots + 22660u - 563, 1.37 \times 10^{623}u^{84} - 5.18 \times 10^{623}u^{83} + \dots + 1.86 \times 10^{626}b + 9.79 \times 10^{625}, -1.57 \times 10^{626}u^{84} + 5.61 \times 10^{626}u^{83} + \dots + 1.05 \times 10^{629}a - 2.05 \times 10^{630} \rangle$$

(i) Arc colorings

$$\begin{aligned} a_7 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0.00149476u^{84} - 0.00535093u^{83} + \dots - 219.191u + 19.5307 \\ -0.000734053u^{84} + 0.00278165u^{83} + \dots + 1.73770u - 0.525772 \end{pmatrix} \\ a_8 &= \begin{pmatrix} -0.00228554u^{84} + 0.00887734u^{83} + \dots + 566.395u - 3.07518 \\ 0.00100924u^{84} - 0.00384822u^{83} + \dots - 135.245u + 4.39669 \end{pmatrix} \\ a_1 &= \begin{pmatrix} 0.00149476u^{84} - 0.00535093u^{83} + \dots - 219.191u + 19.5307 \\ -0.000907114u^{84} + 0.00343407u^{83} + \dots + 15.1295u - 0.879408 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -0.00807421u^{84} + 0.0312493u^{83} + \dots + 2166.94u - 41.0021 \\ 0.00128018u^{84} - 0.00488096u^{83} + \dots - 143.904u + 6.34432 \end{pmatrix} \\ a_2 &= \begin{pmatrix} 0.0000199911u^{84} + 0.000317950u^{83} + \dots + 1627.30u - 21.0979 \\ -0.000107208u^{84} + 0.000448575u^{83} + \dots + 23.8944u + 2.07592 \end{pmatrix} \\ a_6 &= \begin{pmatrix} -0.00789776u^{84} + 0.0298110u^{83} + \dots + 302.352u - 43.5498 \\ 0.00151643u^{84} - 0.00581584u^{83} + \dots - 71.4454u + 1.45524 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 0.000760712u^{84} - 0.00256928u^{83} + \dots - 217.453u + 19.0049 \\ -0.000734053u^{84} + 0.00278165u^{83} + \dots + 1.73770u - 0.525772 \end{pmatrix} \\ a_5 &= \begin{pmatrix} 0.00691097u^{84} - 0.0268025u^{83} + \dots - 2011.98u + 36.5289 \\ -0.000898421u^{84} + 0.00342579u^{83} + \dots + 106.240u - 5.18635 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 0.00633400u^{84} - 0.0239233u^{83} + \dots + 257.277u - 20.7265 \\ -0.00181972u^{84} + 0.00700814u^{83} + \dots + 314.117u - 7.43671 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 0.00633400u^{84} - 0.0239233u^{83} + \dots + 257.277u - 20.7265 \\ -0.00181972u^{84} + 0.00700814u^{83} + \dots + 314.117u - 7.43671 \end{pmatrix} \end{aligned}$$

(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
$u = -1.69082 - 1.61941I$ $a = -0.436358 - 0.161417I$ $b = 0.31582 - 1.49930I$	$6.89508 + 8.42993I$	$2.70635 - 7.99048I$
$u = -1.69082 + 1.61941I$ $a = -0.436358 + 0.161417I$ $b = 0.31582 + 1.49930I$	$6.89508 - 8.42993I$	$2.70635 + 7.99048I$
$u = -1.53981 - 2.15721I$ $a = -0.476435 - 0.093808I$ $b = 0.17509 - 1.40712I$	$1.30376 + 7.93201I$	$-3.99560 - 8.66127I$
$u = -1.53981 + 2.15721I$ $a = -0.476435 + 0.093808I$ $b = 0.17509 + 1.40712I$	$1.30376 - 7.93201I$	$-3.99560 + 8.66127I$
$u = -1.43414 - 0.62814I$ $a = 0.070831 + 0.518869I$ $b = -0.06684 - 1.56381I$	$6.72774 - 5.81245I$	$-0.47469 + 10.65615I$
$u = -1.43414 + 0.62814I$ $a = 0.070831 - 0.518869I$ $b = -0.06684 + 1.56381I$	$6.72774 + 5.81245I$	$-0.47469 - 10.65615I$
$u = -0.95649 - 1.77333I$ $a = 0.700437 - 0.013666I$ $b = -0.33010 + 1.55605I$	$5.84291 + 9.00773I$	$3.53052 - 6.87445I$
$u = -0.95649 + 1.77333I$ $a = 0.700437 + 0.013666I$ $b = -0.33010 - 1.55605I$	$5.84291 - 9.00773I$	$3.53052 + 6.87445I$
$u = -0.92979 - 1.46747I$ $a = 0.337779 + 0.108733I$ $b = 0.162179 + 0.046178I$	$0.84143 - 2.66817I$	$5.48084 - 2.01191I$
$u = -0.92979 + 1.46747I$ $a = 0.337779 - 0.108733I$ $b = 0.162179 - 0.046178I$	$0.84143 + 2.66817I$	$5.48084 + 2.01191I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.91423 - 1.71722I$ $a = 0.530593 - 0.011160I$ $b = -0.01401 + 1.46917I$	$6.60839 + 2.04669I$	$3.94825 - 3.31219I$
$u = -0.91423 + 1.71722I$ $a = 0.530593 + 0.011160I$ $b = -0.01401 - 1.46917I$	$6.60839 - 2.04669I$	$3.94825 + 3.31219I$
$u = -0.800987 - 0.339016I$ $a = 0.67818 + 1.59875I$ $b = -0.189068 + 1.340675I$	$-0.00345 + 5.98667I$	$-2.44841 - 5.62082I$
$u = -0.800987 + 0.339016I$ $a = 0.67818 - 1.59875I$ $b = -0.189068 - 1.340675I$	$-0.00345 - 5.98667I$	$-2.44841 + 5.62082I$
$u = -0.68945 - 1.73537I$ $a = -0.659179 - 0.098520I$ $b = 0.549527 - 0.431566I$	$-4.50297 + 4.26915I$	$-9.22706 - 7.09414I$
$u = -0.68945 + 1.73537I$ $a = -0.659179 + 0.098520I$ $b = 0.549527 + 0.431566I$	$-4.50297 - 4.26915I$	$-9.22706 + 7.09414I$
$u = -0.546300 - 1.002685I$ $a = -1.221269 - 0.129787I$ $b = 0.259329 - 0.320076I$	$-1.81524 + 5.66138I$	$2.54606 - 12.17965I$
$u = -0.546300 + 1.002685I$ $a = -1.221269 + 0.129787I$ $b = 0.259329 + 0.320076I$	$-1.81524 - 5.66138I$	$2.54606 + 12.17965I$
$u = -0.480630 - 0.221669I$ $a = 1.059696 - 0.166365I$ $b = -0.464927 - 0.276903I$	$-1.15598 - 1.24391I$	$-4.65832 + 4.55750I$
$u = -0.480630 + 0.221669I$ $a = 1.059696 + 0.166365I$ $b = -0.464927 + 0.276903I$	$-1.15598 + 1.24391I$	$-4.65832 - 4.55750I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.45334 - 1.85113I$ $a = 0.706182 - 0.126099I$ $b = -0.874632 + 0.626985I$	$-2.87315 + 12.69490I$	$-2.53664 - 9.49789I$
$u = -0.45334 + 1.85113I$ $a = 0.706182 + 0.126099I$ $b = -0.874632 - 0.626985I$	$-2.87315 - 12.69490I$	$-2.53664 + 9.49789I$
$u = -0.398977 - 1.254458I$ $a = -0.630762 - 0.608102I$ $b = 0.281496 + 0.059436I$	$-3.67030 - 1.93800I$	$-9.62892 + 1.36172I$
$u = -0.398977 + 1.254458I$ $a = -0.630762 + 0.608102I$ $b = 0.281496 - 0.059436I$	$-3.67030 + 1.93800I$	$-9.62892 - 1.36172I$
$u = -0.363520 - 0.617898I$ $a = -0.40515 + 1.62583I$ $b = 0.23659 - 1.53137I$	$7.27474 + 10.59066I$	$2.83359 - 6.46789I$
$u = -0.363520 + 0.617898I$ $a = -0.40515 - 1.62583I$ $b = 0.23659 + 1.53137I$	$7.27474 - 10.59066I$	$2.83359 + 6.46789I$
$u = -0.349344 - 0.623128I$ $a = 1.209605 - 0.648790I$ $b = -0.05015 + 1.54873I$	$7.26328 + 2.81966I$	$4.38065 - 6.67185I$
$u = -0.349344 + 0.623128I$ $a = 1.209605 + 0.648790I$ $b = -0.05015 - 1.54873I$	$7.26328 - 2.81966I$	$4.38065 + 6.67185I$
$u = -0.29734 - 1.41249I$ $a = 0.738557 + 0.442528I$ $b = -1.044072 + 0.563184I$	$-3.19196 - 6.54059I$	$-3.19475 + 9.32087I$
$u = -0.29734 + 1.41249I$ $a = 0.738557 - 0.442528I$ $b = -1.044072 - 0.563184I$	$-3.19196 + 6.54059I$	$-3.19475 - 9.32087I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.22401 - 1.61262I$ $a = -0.616211 - 0.160948I$ $b = 0.417306 - 0.644658I$	$-3.93614 - 0.79985I$	$-7.60139 - 0.55349I$
$u = -0.22401 + 1.61262I$ $a = -0.616211 + 0.160948I$ $b = 0.417306 + 0.644658I$	$-3.93614 + 0.79985I$	$-7.60139 + 0.55349I$
$u = -0.214868 - 0.655352I$ $a = 0.21670 - 2.07437I$ $b = 0.01782 + 1.44045I$	$7.71128 - 0.46262I$	$4.11703 - 2.15416I$
$u = -0.214868 + 0.655352I$ $a = 0.21670 + 2.07437I$ $b = 0.01782 - 1.44045I$	$7.71128 + 0.46262I$	$4.11703 + 2.15416I$
$u = -0.126881 - 0.855234I$ $a = 0.098310 + 0.710822I$ $b = 0.549062 - 0.432595I$	$0.34617 - 2.88115I$	$1.43324 + 4.17633I$
$u = -0.126881 + 0.855234I$ $a = 0.098310 - 0.710822I$ $b = 0.549062 + 0.432595I$	$0.34617 + 2.88115I$	$1.43324 - 4.17633I$
$u = -0.02516 - 1.87963I$ $a = -0.523031 + 0.404133I$ $b = 0.063949 - 1.406241I$	$1.25410 + 3.01463I$	$-1.79692 - 2.11788I$
$u = -0.02516 + 1.87963I$ $a = -0.523031 - 0.404133I$ $b = 0.063949 + 1.406241I$	$1.25410 - 3.01463I$	$-1.79692 + 2.11788I$
$u = 0.0113252 - 0.0369169I$ $a = 17.1958 + 7.8264I$ $b = -0.19200 + 1.58024I$	$8.18862 + 4.43585I$	$5.12877 - 0.33540I$
$u = 0.0113252 + 0.0369169I$ $a = 17.1958 - 7.8264I$ $b = -0.19200 - 1.58024I$	$8.18862 - 4.43585I$	$5.12877 + 0.33540I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.076708 - 1.393747I$ $a = 0.524478 - 0.410771I$ $b = -0.04022 + 1.56772I$	$7.05028 + 2.25316I$	$5.27464 - 3.53157I$
$u = 0.076708 + 1.393747I$ $a = 0.524478 + 0.410771I$ $b = -0.04022 - 1.56772I$	$7.05028 - 2.25316I$	$5.27464 + 3.53157I$
$u = 0.084629 - 0.677304I$ $a = 0.51917 - 1.81395I$ $b = 0.23559 + 1.46791I$	$8.34857 - 2.37496I$	$5.83652 + 6.41690I$
$u = 0.084629 + 0.677304I$ $a = 0.51917 + 1.81395I$ $b = 0.23559 - 1.46791I$	$8.34857 + 2.37496I$	$5.83652 - 6.41690I$
$u = 0.166458 - 0.023408I$ $a = -5.96543 + 0.10299I$ $b = 0.681398 - 0.530598I$	$0.50703 + 7.20249I$	$0.12127 - 7.85964I$
$u = 0.166458 + 0.023408I$ $a = -5.96543 - 0.10299I$ $b = 0.681398 + 0.530598I$	$0.50703 - 7.20249I$	$0.12127 + 7.85964I$
$u = 0.188321 - 0.777117I$ $a = 0.980850 - 0.561487I$ $b = -0.655351 - 0.766822I$	$0.47607 - 1.35841I$	$1.77924 + 1.29134I$
$u = 0.188321 + 0.777117I$ $a = 0.980850 + 0.561487I$ $b = -0.655351 + 0.766822I$	$0.47607 + 1.35841I$	$1.77924 - 1.29134I$
$u = 0.203806 - 0.155432I$ $a = 2.41525 + 2.41702I$ $b = 0.415037 + 0.407630I$	$2.45654 + 0.38545I$	$7.94496 + 2.04701I$
$u = 0.203806 + 0.155432I$ $a = 2.41525 - 2.41702I$ $b = 0.415037 - 0.407630I$	$2.45654 - 0.38545I$	$7.94496 - 2.04701I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.219757 - 1.215808I$		
$a = 1.019237 - 0.415984I$	$-4.64818 - 2.67744I$	$-7.22195 + 4.12537I$
$b = -0.751801 - 0.170183I$		
$u = 0.219757 + 1.215808I$		
$a = 1.019237 + 0.415984I$	$-4.64818 + 2.67744I$	$-7.22195 - 4.12537I$
$b = -0.751801 + 0.170183I$		
$u = 0.22032 - 1.52784I$		
$a = 0.814242 + 0.257921I$	$-2.13717 - 1.86843I$	$-0.68579 - 3.94659I$
$b = -0.527691 - 1.034083I$		
$u = 0.22032 + 1.52784I$		
$a = 0.814242 - 0.257921I$	$-2.13717 + 1.86843I$	$-0.68579 + 3.94659I$
$b = -0.527691 + 1.034083I$		
$u = 0.234370 - 0.643455I$		
$a = 1.116697 + 0.043506I$	$-0.10663 - 1.41201I$	$-0.46586 + 4.19142I$
$b = -0.316105 - 0.557512I$		
$u = 0.234370 + 0.643455I$		
$a = 1.116697 - 0.043506I$	$-0.10663 + 1.41201I$	$-0.46586 - 4.19142I$
$b = -0.316105 + 0.557512I$		
$u = 0.237286$		
$a = 5.25385$	2.46366	32.7465
$b = 0.152350$		
$u = 0.31935 - 1.59205I$		
$a = 0.780442 + 0.138854I$	$-0.82206 - 4.30776I$	$4.91444 + 5.36720I$
$b = -0.973143 - 0.473486I$		
$u = 0.31935 + 1.59205I$		
$a = 0.780442 - 0.138854I$	$-0.82206 + 4.30776I$	$4.91444 - 5.36720I$
$b = -0.973143 + 0.473486I$		
$u = 0.40956 - 1.81984I$		
$a = -0.638573 - 0.104413I$	$-3.81248 - 5.22210I$	$-9.67170 + 8.47092I$
$b = 0.610909 + 0.184427I$		

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.40956 + 1.81984I$ $a = -0.638573 + 0.104413I$ $b = 0.610909 - 0.184427I$	$-3.81248 + 5.22210I$	$-9.67170 - 8.47092I$
$u = 0.46861 - 1.75592I$ $a = -0.434599 - 0.032928I$ $b = 0.912737 + 0.322622I$	$0.88272 - 4.07370I$	$1.77036 + 10.38748I$
$u = 0.46861 + 1.75592I$ $a = -0.434599 + 0.032928I$ $b = 0.912737 - 0.322622I$	$0.88272 + 4.07370I$	$1.77036 - 10.38748I$
$u = 0.527954 - 0.264258I$ $a = 0.992250 - 0.237234I$ $b = -0.340741 - 0.634132I$	$-0.10975 - 1.69726I$	$1.00781 + 4.89719I$
$u = 0.527954 + 0.264258I$ $a = 0.992250 + 0.237234I$ $b = -0.340741 + 0.634132I$	$-0.10975 + 1.69726I$	$1.00781 - 4.89719I$
$u = 0.610260 - 0.301261I$ $a = 0.930012 + 0.786578I$ $b = -0.081406 - 1.411568I$	$4.16809 - 3.00834I$	$0.55716 + 3.95073I$
$u = 0.610260 + 0.301261I$ $a = 0.930012 - 0.786578I$ $b = -0.081406 + 1.411568I$	$4.16809 + 3.00834I$	$0.55716 - 3.95073I$
$u = 0.721706 - 1.048330I$ $a = -0.459024 + 0.669666I$ $b = 0.307600 + 1.031382I$	$-1.29284 + 1.77043I$	$0.02454 - 7.50172I$
$u = 0.721706 + 1.048330I$ $a = -0.459024 - 0.669666I$ $b = 0.307600 - 1.031382I$	$-1.29284 - 1.77043I$	$0.02454 + 7.50172I$
$u = 0.752826 - 0.493252I$ $a = -0.782372 + 0.645298I$ $b = -0.13499 + 1.80689I$	$5.31835 - 0.73098I$	$2.97507 - 4.35395I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.752826 + 0.493252I$ $a = -0.782372 - 0.645298I$ $b = -0.13499 - 1.80689I$	$5.31835 + 0.73098I$	$2.97507 + 4.35395I$
$u = 0.875917 - 0.062812I$ $a = -0.199162 - 1.218965I$ $b = -0.109085 + 0.628228I$	$-0.68905 + 4.95944I$	$0.42962 - 8.16157I$
$u = 0.875917 + 0.062812I$ $a = -0.199162 + 1.218965I$ $b = -0.109085 - 0.628228I$	$-0.68905 - 4.95944I$	$0.42962 + 8.16157I$
$u = 0.98646 - 1.39747I$ $a = -0.905051 + 0.109995I$ $b = 0.08548 + 1.46970I$	$4.16408 - 6.92555I$	$5.08205 + 7.21533I$
$u = 0.98646 + 1.39747I$ $a = -0.905051 - 0.109995I$ $b = 0.08548 - 1.46970I$	$4.16408 + 6.92555I$	$5.08205 - 7.21533I$
$u = 1.058100 - 0.086495I$ $a = 0.174857 + 1.132101I$ $b = 0.012295 + 1.190846I$	$-0.241277 + 0.561006I$	$-1.62918 + 1.42383I$
$u = 1.058100 + 0.086495I$ $a = 0.174857 - 1.132101I$ $b = 0.012295 - 1.190846I$	$-0.241277 - 0.561006I$	$-1.62918 - 1.42383I$
$u = 1.13068 - 1.99244I$ $a = 0.624987 - 0.018227I$ $b = -0.30114 - 1.58000I$	$4.3164 - 17.0324I$	$0.62209 + 8.89044I$
$u = 1.13068 + 1.99244I$ $a = 0.624987 + 0.018227I$ $b = -0.30114 + 1.58000I$	$4.3164 + 17.0324I$	$0.62209 - 8.89044I$
$u = 1.47234 - 1.50550I$ $a = -0.391039 + 0.189327I$ $b = 0.39992 + 1.65365I$	$5.29095 - 1.80419I$	$1.15583 + 10.91277I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.47234 + 1.50550I$ $a = -0.391039 - 0.189327I$ $b = 0.39992 - 1.65365I$	$5.29095 + 1.80419I$	$1.15583 - 10.91277I$
$u = 1.60001 - 1.70523I$ $a = -0.525406 + 0.258710I$ $b = 0.16403 + 1.50097I$	$1.87995 - 6.80929I$	$-6.53169 + 4.78403I$
$u = 1.60001 + 1.70523I$ $a = -0.525406 - 0.258710I$ $b = 0.16403 - 1.50097I$	$1.87995 + 6.80929I$	$-6.53169 - 4.78403I$
$u = 1.97800 - 2.17156I$ $a = 0.318861 - 0.130100I$ $b = 0.02814 - 1.42781I$	$5.97217 + 3.17989I$	$1.79471 - 1.96111I$
$u = 1.97800 + 2.17156I$ $a = 0.318861 + 0.130100I$ $b = 0.02814 + 1.42781I$	$5.97217 - 3.17989I$	$1.79471 + 1.96111I$

III. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1	$(u^{17} + u^{16} + \dots - 3u - 1)(u^{85} + 4u^{84} + \dots + 405u + 83)$
c_2	$(u^{17} - 2u^{15} + \dots - u - 1)(u^{85} + u^{84} + \dots - 171u + 89)$
c_3	$(u^{17} + 6u^{16} + \dots + 24u + 4)(u^{85} + u^{84} + \dots + 172u + 28)$
c_4	$(u^{17} + 11u^{15} + \dots + 2u + 1)(u^{85} + u^{84} + \dots + 28u - 1)$
c_5	$(u^{17} + u^{16} + \dots - 5u - 1)(u^{85} + 2u^{84} + \dots + 2503u - 701)$
c_6	$(u^{17} - 4u^{16} + \dots - 2u + 1)(u^{85} + 3u^{84} + \dots - 216u + 47)$
c_7	$(u^{17} - u^{16} + \dots - u + 1)(u^{85} + 22u^{83} + \dots + 295u - 89)$
c_8	$(u^{17} - 3u^{16} + \dots - 2u^2 - 1)(u^{85} + 6u^{84} + \dots - 18u - 1)$
c_9, c_{10}	$(u^{17} + 11u^{15} + \dots + 2u - 1)(u^{85} + u^{84} + \dots + 28u - 1)$
c_{11}	$(u^{17} + u^{16} + \dots - u - 1)(u^{85} + 22u^{83} + \dots + 295u - 89)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1	$(y^{17} - 11y^{16} + \dots - 3y - 1)(y^{85} - 22y^{84} + \dots + 57951y - 6889)$
c_2	$(y^{17} - 4y^{16} + \dots + 23y - 1)(y^{85} + 5y^{84} + \dots - 428219y - 7921)$
c_3	$(y^{17} + 6y^{16} + \dots + 96y - 16)(y^{85} - y^{84} + \dots + 36528y - 784)$
c_4, c_9, c_{10}	$(y^{17} + 22y^{16} + \dots + 14y - 1)(y^{85} + 91y^{84} + \dots + 108y - 1)$
c_5	$(y^{17} - 7y^{16} + \dots + 11y - 1)$ $(y^{85} - 26y^{84} + \dots + 15305105y - 491401)$
c_6	$(y^{17} - 8y^{16} + \dots + 12y - 1)(y^{85} - 27y^{84} + \dots - 226978y - 2209)$
c_7, c_{11}	$(y^{17} + 7y^{16} + \dots - 15y - 1)(y^{85} + 44y^{84} + \dots - 152029y - 7921)$
c_8	$(y^{17} + 5y^{16} + \dots - 4y - 1)(y^{85} + 14y^{84} + \dots - 46y - 1)$