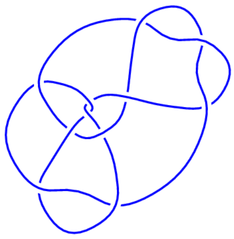
$11a_{292}$ ($K11a_{292}$)



[1]

Arc Sequences

$$\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to\downarrow\to$$

8 5 1 9 2 11 10 3 6 7 4

Solving Sequence

$$4{,}11 \xrightarrow[c_{11}]{} 1 \xrightarrow[c_3]{} 3{,}7 \xrightarrow[c_6]{} 6 \xrightarrow[c_{10}]{} 10 \xrightarrow[c_7]{} 8 \xrightarrow[c_1]{} 2 \xrightarrow[c_5]{} 5 \xrightarrow[c_9]{} 9 \gg c_2, c_4, c_8$$

Representation Ideals

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

$$I_1^u = \langle 8u^3 - 20u^2 + 20u - 7,\ b + 1,\ 16u^2 + 7a - 40u + 26\rangle$$

$$\begin{aligned} I_2^u = \langle & 8u^{25} - 4u^{24} + \cdots + 9264u - 1003, \\ & -2.91729 \times 10^{71}u^{24} + 1.76643 \times 10^{69}u^{23} + \cdots + 2.41161 \times 10^{72}b - 6.69756 \times 10^{73}, \\ & 2.74019 \times 10^{74}u^{24} + 9.23431 \times 10^{73}u^{23} + \cdots + 2.41885 \times 10^{75}a + 3.80119 \times 10^{76}\rangle \end{aligned}$$

$$\begin{aligned} I_3^u = \langle & u^{42} + 17u^{41} + \cdots - 81676u + 19157, \\ & 9.50298 \times 10^{216}u^{41} + 1.53867 \times 10^{218}u^{40} + \cdots + 8.28158 \times 10^{217}b + 2.14146 \times 10^{221}, \\ & 1.32277 \times 10^{221}u^{41} + 2.11281 \times 10^{222}u^{40} + \cdots + 1.58650 \times 10^{222}a + 2.03199 \times 10^{225}\rangle \end{aligned}$$

There are 3 irreducible components with 70 representations.

[1]The knot diagram image is adapter from "C. Livingston and A. H. Moore, KnotInfo: Table of Knot Invariants, http://www.indiana.edu/ knotinfo"

I. $I_1^u = \langle 8u^3 - 20u^2 + 20u - 7,\ b + 1,\ 16u^2 + 7a - 40u + 26 \rangle$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} -\frac{16}{7}u^2 + \frac{40}{7}u - \frac{26}{7} \\ -1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -\frac{16}{7}u^2 + \frac{40}{7}u - \frac{19}{7} \\ -1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -\frac{16}{7}u^2 + \frac{40}{7}u - \frac{12}{7} \\ -1 \end{pmatrix}$$

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

$$a_6 = \begin{pmatrix} \frac{32}{7}u^2 - \frac{52}{7}u + \frac{24}{7} \\ -u + 2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -\frac{16}{7}u^2 + \frac{40}{7}u - \frac{26}{7} \\ -2u^2 + 2u - 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -\frac{32}{7}u^2 + \frac{52}{7}u - \frac{24}{7} \\ 2u^2 - 3u + \frac{3}{2} \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -\frac{24}{7}u^2 + \frac{46}{7}u - \frac{18}{7} \\ \frac{1}{2}u - \frac{3}{2} \end{pmatrix}$$

$$a_5 = \begin{pmatrix} \frac{8}{7}u^2 - \frac{6}{7}u + \frac{6}{7} \\ -\frac{1}{2}u + \frac{1}{2} \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -\frac{32}{7}u^2 + \frac{52}{7}u - \frac{24}{7} \\ 2u^2 - 3u + \frac{3}{2} \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -\frac{32}{7}u^2 + \frac{52}{7}u - \frac{24}{7} \\ 2u^2 - 3u + \frac{3}{2} \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.715080$ $a = -0.796890$ $b = -1.00000$	-2.75839	-9.85754
$u = 0.892460 - 0.653571I$ $a = 0.541302 - 1.068240I$ $b = -1.00000$	$1.37919 - 2.82812I$	$-9.94623 + 0.32679I$
$u = 0.892460 + 0.653571I$ $a = 0.541302 + 1.068240I$ $b = -1.00000$	$1.37919 + 2.82812I$	$-9.94623 - 0.32679I$

II. $\boldsymbol{I_2^u = \langle 8u^{25} - 4u^{24} + \cdots + 9264u - 1003,\ -2.92\times 10^{71}u^{24} + 1.77\times 10^{69}u^{23} + \cdots + 2.41\times 10^{72}b - 6.70\times 10^{73},\ 2.74\times 10^{74}u^{24} + 9.23\times 10^{73}u^{23} + \cdots + 2.42\times 10^{75}a + 3.80\times 10^{76}\rangle}$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix}-0.113285u^{24} - 0.0381765u^{23} + \cdots + 125.746u - 15.7149\\0.120968u^{24} - 0.000732469u^{23} + \cdots - 206.554u + 27.7721\end{pmatrix}$$

$$a_1 = \begin{pmatrix}-0.234253u^{24} - 0.0374441u^{23} + \cdots + 332.300u - 43.4870\\0.120968u^{24} - 0.000732469u^{23} + \cdots - 206.554u + 27.7721\end{pmatrix}$$

$$a_3 = \begin{pmatrix}0.176258u^{24} + 0.0373201u^{23} + \cdots - 255.194u + 34.6724\\-0.387358u^{24} - 0.121437u^{23} + \cdots + 471.246u - 58.8804\end{pmatrix}$$

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

$$a_6 = \begin{pmatrix}0.0161873u^{24} + 0.00755392u^{23} + \cdots + 5.37607u - 2.10135\\0.189667u^{24} + 0.0604448u^{23} + \cdots - 218.246u + 26.4666\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}-0.113285u^{24} - 0.0381765u^{23} + \cdots + 125.746u - 15.7149\\0.194231u^{24} + 0.0159361u^{23} + \cdots - 302.151u + 39.6601\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-0.0161873u^{24} - 0.00755392u^{23} + \cdots - 5.37607u + 2.10135\\-0.185478u^{24} - 0.0684475u^{23} + \cdots + 204.155u - 24.5048\end{pmatrix}$$

$$a_2 = \begin{pmatrix}-0.0253690u^{24} + 0.0491763u^{23} + \cdots + 116.759u - 18.4524\\-0.0480054u^{24} + 0.00999038u^{23} + \cdots + 86.9411u - 10.8049\end{pmatrix}$$

$$a_5 = \begin{pmatrix}0.454350u^{24} + 0.124939u^{23} + \cdots - 564.110u + 70.5219\\0.206335u^{24} + 0.0976694u^{23} + \cdots - 205.658u + 24.4382\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-0.325689u^{24} - 0.0867571u^{23} + \cdots + 440.977u - 57.9573\\0.0468241u^{24} - 0.0290624u^{23} + \cdots - 115.447u + 15.9568\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-0.325689u^{24} - 0.0867571u^{23} + \cdots + 440.977u - 57.9573\\0.0468241u^{24} - 0.0290624u^{23} + \cdots - 115.447u + 15.9568\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-3.40236-0.88950I$ $a=-0.192053-0.373154I$ $b=-0.57182-1.34966I$	$9.6840-16.2255I$	$-4.63027+8.78327I$
$u=-3.40236+0.88950I$ $a=-0.192053+0.373154I$ $b=-0.57182+1.34966I$	$9.6840+16.2255I$	$-4.63027-8.78327I$
$u=-2.94761-0.31946I$ $a=\ \ 0.153879+0.495279I$ $b=\ \ 0.284532+1.100378I$	$7.47014-7.28043I$	$-3.70614+9.00978I$
$u=-2.94761+0.31946I$ $a=\ \ 0.153879-0.495279I$ $b=\ \ 0.284532-1.100378I$	$7.47014+7.28043I$	$-3.70614-9.00978I$
$u=-1.310302-0.162766I$ $a=-0.578714+0.312300I$ $b=-0.546754+1.295427I$	$4.07653+12.13016I$	$-8.33349-8.34430I$
$u=-1.310302+0.162766I$ $a=-0.578714-0.312300I$ $b=-0.546754-1.295427I$	$4.07653-12.13016I$	$-8.33349+8.34430I$
$u=-0.960208-0.456520I$ $a=\ \ 0.378374-0.751449I$ $b=\ \ 0.263483-0.886965I$	$0.86744+3.46984I$	$-11.3753-9.7737I$
$u=-0.960208+0.456520I$ $a=\ \ 0.378374+0.751449I$ $b=\ \ 0.263483+0.886965I$	$0.86744-3.46984I$	$-11.3753+9.7737I$
$u=-0.269596-0.347350I$ $a=-1.93992-2.15017I$ $b=-0.238848-0.287288I$	$2.68775+2.30692I$	$-5.11682-1.56003I$
$u=-0.269596+0.347350I$ $a=-1.93992+2.15017I$ $b=-0.238848+0.287288I$	$2.68775-2.30692I$	$-5.11682+1.56003I$

Solution to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.274083$ $a = -1.03755$ $b = 0.268925$	-0.608310	-16.5876
$u = 0.412823 - 0.197617I$ $a = -1.56714 - 1.07258I$ $b = -0.131692 - 0.750408I$	$-0.421269 - 1.124173I$	$-15.1711 + 4.4746I$
$u = 0.412823 + 0.197617I$ $a = -1.56714 + 1.07258I$ $b = -0.131692 + 0.750408I$	$-0.421269 + 1.124173I$	$-15.1711 - 4.4746I$
$u = 0.730960 - 0.187353I$ $a = 0.709690 + 0.346985I$ $b = 1.134095 - 0.298870I$	$-2.92328 - 0.50544I$	$-12.3574 + 10.8616I$
$u = 0.730960 + 0.187353I$ $a = 0.709690 - 0.346985I$ $b = 1.134095 + 0.298870I$	$-2.92328 + 0.50544I$	$-12.3574 - 10.8616I$
$u = 0.78181 - 1.32695I$ $a = -0.684285 + 0.571675I$ $b = 1.330580 - 0.239812I$	$1.78338 - 3.43475I$	$-2.55385 + 7.61768I$
$u = 0.78181 + 1.32695I$ $a = -0.684285 - 0.571675I$ $b = 1.330580 + 0.239812I$	$1.78338 + 3.43475I$	$-2.55385 - 7.61768I$
$u = 0.804023 - 0.114653I$ $a = 0.530474 + 1.067405I$ $b = -0.474580 + 1.242553I$	$5.61589 + 7.41862I$	$-5.99307 - 4.17618I$
$u = 0.804023 + 0.114653I$ $a = 0.530474 - 1.067405I$ $b = -0.474580 - 1.242553I$	$5.61589 - 7.41862I$	$-5.99307 + 4.17618I$
$u = 1.49923 - 0.19011I$ $a = -0.409586 + 0.752304I$ $b = -0.306312 + 0.956199I$	$3.65181 + 5.92897I$	$-7.49144 - 10.01248I$

Solution to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \quad 1.49923 + 0.19011I$ $a = -0.409586 - 0.752304I$ $b = -0.306312 - 0.956199I$	$3.65181 - 5.92897I$	$-7.49144 + 10.01248I$
$u = \quad 1.58324 - 0.00964I$ $a = \quad 0.103270 - 0.758664I$ $b = \quad 0.946754 - 0.548140I$	$0.27538 + 2.19318I$	$-11.91071 + 0.36993I$
$u = \quad 1.58324 + 0.00964I$ $a = \quad 0.103270 + 0.758664I$ $b = \quad 0.946754 + 0.548140I$	$0.27538 - 2.19318I$	$-11.91071 - 0.36993I$
$u = \quad 3.19095 - 0.39292I$ $a = \quad 0.075600 - 0.474876I$ $b = -0.323896 - 1.309708I$	$13.5945 - 5.6631I$	$-1.19159 + 4.67130I$
$u = \quad 3.19095 + 0.39292I$ $a = \quad 0.075600 + 0.474876I$ $b = -0.323896 + 1.309708I$	$13.5945 + 5.6631I$	$-1.19159 - 4.67130I$

III. $\boldsymbol{I^u_3 = \langle u^{42} + 17u^{41} + \cdots - 81676u + 19157,\ 9.50 \times 10^{216}u^{41} + 1.54 \times 10^{218}u^{40} + \cdots + 8.28 \times 10^{217}b + 2.14 \times 10^{221},\ 1.32 \times 10^{221}u^{41} + 2.11 \times 10^{222}u^{40} + \cdots + 1.59 \times 10^{222}a + 2.03 \times 10^{225}\rangle}$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} -0.0833765u^{41} - 1.33174u^{40} + \cdots + 5990.29u - 1280.80 \\ -0.114748u^{41} - 1.85795u^{40} + \cdots + 13837.9u - 2585.81 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0313719u^{41} + 0.526205u^{40} + \cdots - 7847.60u + 1305.01 \\ -0.114748u^{41} - 1.85795u^{40} + \cdots + 13837.9u - 2585.81 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.0124063u^{41} - 0.187450u^{40} + \cdots - 1683.11u + 200.098 \\ -0.0907738u^{41} - 1.48861u^{40} + \cdots + 15153.1u - 2661.01 \end{pmatrix}$$

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

$$a_6 = \begin{pmatrix} -0.0223521u^{41} - 0.359251u^{40} + \cdots + 1997.37u - 407.317 \\ -0.0780018u^{41} - 1.26995u^{40} + \cdots + 10890.2u - 1976.62 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0833765u^{41} - 1.33174u^{40} + \cdots + 5990.29u - 1280.80 \\ -0.0353248u^{41} - 0.576644u^{40} + \cdots + 5244.45u - 944.868 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0223521u^{41} + 0.359251u^{40} + \cdots - 1997.37u + 407.317 \\ 0.0605288u^{41} + 0.986639u^{40} + \cdots - 8766.48u + 1579.40 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0762153u^{41} + 1.25957u^{40} + \cdots - 15058.8u + 2569.09 \\ -0.0502030u^{41} - 0.805962u^{40} + \cdots + 4508.11u - 905.842 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.202965u^{41} + 3.30276u^{40} + \cdots - 28433.7u + 5125.99 \\ -0.0518138u^{41} - 0.826883u^{40} + \cdots + 3491.07u - 767.009 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.101651u^{41} - 1.62082u^{40} + \cdots + 6652.86u - 1461.41 \\ -0.0582746u^{41} - 0.956208u^{40} + \cdots + 10053.7u - 1753.22 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.101651u^{41} - 1.62082u^{40} + \cdots + 6652.86u - 1461.41 \\ -0.0582746u^{41} - 0.956208u^{40} + \cdots + 10053.7u - 1753.22 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes =unknown

(iv) Complex Volumes and Cusp Shapes

Solution to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -5.39247 - 0.15316I$ $a = 0.022890 - 0.246823I$ $b = 0.077855 - 1.154111I$	$6.68759 + 2.26276I$	$-8.12423 - 3.11409I$
$u = -5.39247 + 0.15316I$ $a = 0.022890 + 0.246823I$ $b = 0.077855 + 1.154111I$	$6.68759 - 2.26276I$	$-8.12423 + 3.11409I$
$u = -3.29416 - 0.80249I$ $a = -0.122452 - 0.396345I$ $b = 0.23480 - 1.42238I$	$8.43398 + 1.80763I$	$-3.74093 - 2.73625I$
$u = -3.29416 + 0.80249I$ $a = -0.122452 + 0.396345I$ $b = 0.23480 + 1.42238I$	$8.43398 - 1.80763I$	$-3.74093 + 2.73625I$
$u = -3.09551 - 0.89175I$ $a = -0.182666 - 0.403424I$ $b = -0.70246 - 1.26246I$	$10.87742 - 4.29720I$	$-1.24857 + 3.93304I$
$u = -3.09551 + 0.89175I$ $a = -0.182666 + 0.403424I$ $b = -0.70246 + 1.26246I$	$10.87742 + 4.29720I$	$-1.24857 - 3.93304I$
$u = -2.51330 - 1.96559I$ $a = 0.118173 - 0.092420I$ $b = 0.089091 - 1.011836I$	2.46606	-16.2154
$u = -2.51330 + 1.96559I$ $a = 0.118173 + 0.092420I$ $b = 0.089091 + 1.011836I$	2.46606	-16.2154
$u = -1.289542 - 0.431224I$ $a = -0.442242 - 0.116169I$ $b = -0.538046 - 1.172547I$	$5.31141 - 1.59690I$	$-4.86726 + 4.73829I$
$u = -1.289542 + 0.431224I$ $a = -0.442242 + 0.116169I$ $b = -0.538046 + 1.172547I$	$5.31141 + 1.59690I$	$-4.86726 - 4.73829I$

Solution to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.852909 - 0.966705I$ $a = 0.668532 + 0.886919I$ $b = -1.149007 - 0.072988I$	$5.66073 + 10.18327I$	$-6.74618 - 7.21296I$
$u = -0.852909 + 0.966705I$ $a = 0.668532 - 0.886919I$ $b = -1.149007 + 0.072988I$	$5.66073 - 10.18327I$	$-6.74618 + 7.21296I$
$u = -0.751801 - 0.137641I$ $a = 0.031720 - 1.273871I$ $b = 0.359361 - 0.936794I$	$1.91999 + 2.68588I$	$-9.85070 - 3.67518I$
$u = -0.751801 + 0.137641I$ $a = 0.031720 + 1.273871I$ $b = 0.359361 + 0.936794I$	$1.91999 - 2.68588I$	$-9.85070 + 3.67518I$
$u = -0.743172 - 0.138762I$ $a = -0.170016 + 1.027166I$ $b = -0.764352 + 0.086691I$	$2.12997 - 2.73152I$	$-8.80842 + 2.00184I$
$u = -0.743172 + 0.138762I$ $a = -0.170016 - 1.027166I$ $b = -0.764352 - 0.086691I$	$2.12997 + 2.73152I$	$-8.80842 - 2.00184I$
$u = -0.698110 - 0.191862I$ $a = -0.628889 - 0.886836I$ $b = 0.423673 - 1.154261I$	$2.12997 + 2.73152I$	$-8.80842 - 2.00184I$
$u = -0.698110 + 0.191862I$ $a = -0.628889 + 0.886836I$ $b = 0.423673 + 1.154261I$	$2.12997 - 2.73152I$	$-8.80842 + 2.00184I$
$u = -0.678594 - 0.254098I$ $a = -0.203931 - 1.328502I$ $b = -0.518967 - 0.275770I$	$1.91999 + 2.68588I$	$-9.85070 - 3.67518I$
$u = -0.678594 + 0.254098I$ $a = -0.203931 + 1.328502I$ $b = -0.518967 + 0.275770I$	$1.91999 - 2.68588I$	$-9.85070 + 3.67518I$

Solution to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.620031-0.163771I$ $a=-0.987330+0.669551I$ $b=-1.029771-0.113619I$	$0.38553+6.51836I$	$-11.49661-6.69162I$
$u=-0.620031+0.163771I$ $a=-0.987330-0.669551I$ $b=-1.029771+0.113619I$	$0.38553-6.51836I$	$-11.49661+6.69162I$
$u=-0.327688-0.824008I$ $a=1.43554+0.67441I$ $b=-0.881295-0.383290I$	$8.43398-1.80763I$	$-3.74093+2.73625I$
$u=-0.327688+0.824008I$ $a=1.43554-0.67441I$ $b=-0.881295+0.383290I$	$8.43398+1.80763I$	$-3.74093-2.73625I$
$u=0.00519-2.60233I$ $a=0.509987-0.062977I$ $b=0.215364-0.842067I$	$6.68759-2.26276I$	$-8.12423+3.11409I$
$u=0.00519+2.60233I$ $a=0.509987+0.062977I$ $b=0.215364+0.842067I$	$6.68759+2.26276I$	$-8.12423-3.11409I$
$u=0.171629-0.286127I$ $a=-0.58791-2.12486I$ $b=0.193105-0.268938I$	$-0.369814-0.901098I$	$-13.44354+1.25880I$
$u=0.171629+0.286127I$ $a=-0.58791+2.12486I$ $b=0.193105+0.268938I$	$-0.369814+0.901098I$	$-13.44354-1.25880I$
$u=0.204854-0.033645I$ $a=2.73848-1.21245I$ $b=-0.354858-1.344692I$	$5.31141+1.59690I$	$-4.86726-4.73829I$
$u=0.204854+0.033645I$ $a=2.73848+1.21245I$ $b=-0.354858+1.344692I$	$5.31141-1.59690I$	$-4.86726+4.73829I$

Solution to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.437849 - 0.045195I$ $a = -0.95439 + 3.04038I$ $b = 0.406166 + 0.029756I$	$4.61079 + 4.48385I$	$-8.56586 - 2.47352I$
$u = 0.437849 + 0.045195I$ $a = -0.95439 - 3.04038I$ $b = 0.406166 - 0.029756I$	$4.61079 - 4.48385I$	$-8.56586 + 2.47352I$
$u = 0.844546 - 0.038298I$ $a = -0.827114 - 0.270139I$ $b = -0.135993 - 0.853092I$	$-0.369814 - 0.901098I$	$-13.44354 + 1.25880I$
$u = 0.844546 + 0.038298I$ $a = -0.827114 + 0.270139I$ $b = -0.135993 + 0.853092I$	$-0.369814 + 0.901098I$	$-13.44354 - 1.25880I$
$u = 1.165441 - 0.006881I$ $a = 0.620623 - 0.213804I$ $b = 0.580475 - 1.281077I$	$0.38553 + 6.51836I$	$-11.49661 - 6.69162I$
$u = 1.165441 + 0.006881I$ $a = 0.620623 + 0.213804I$ $b = 0.580475 + 1.281077I$	$0.38553 - 6.51836I$	$-11.49661 + 6.69162I$
$u = 2.79791 - 1.31031I$ $a = -0.270876 + 0.364354I$ $b = -0.211636 + 1.044904I$	$4.61079 + 4.48385I$	$-8.56586 - 2.47352I$
$u = 2.79791 + 1.31031I$ $a = -0.270876 - 0.364354I$ $b = -0.211636 - 1.044904I$	$4.61079 - 4.48385I$	$-8.56586 + 2.47352I$
$u = 2.79928 - 0.87816I$ $a = 0.210928 - 0.438136I$ $b = -0.41262 - 1.50197I$	$10.87742 + 4.29720I$	$-1.24857 - 3.93304I$
$u = 2.79928 + 0.87816I$ $a = 0.210928 + 0.438136I$ $b = -0.41262 + 1.50197I$	$10.87742 - 4.29720I$	$-1.24857 + 3.93304I$

Solution to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 3.33058 - 0.85408I$ $a = 0.182248 - 0.374433I$ $b = 0.61911 - 1.37353I$	$5.66073 + 10.18327I$	$-6.74618 - 7.21296I$
$u = 3.33058 + 0.85408I$ $a = 0.182248 + 0.374433I$ $b = 0.61911 + 1.37353I$	$5.66073 - 10.18327I$	$-6.74618 + 7.21296I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossings
c_1	$(8u^3-4u^2+1)(8u^{25}+4u^{24}+\cdots+2u-1)$ $(u^{42}+u^{41}+\cdots-2496u+1081)$
c_2, c_{11}	$(u-1)^3(u^{25}-3u^{24}+\cdots+3u-1)(u^{42}+7u^{41}+\cdots+2u+1)$
c_3, c_5	$(u+1)^3(u^{25}-3u^{24}+\cdots+3u-1)(u^{42}+7u^{41}+\cdots+2u+1)$
c_4	$(8u^3+4u^2-1)(8u^{25}+4u^{24}+\cdots+2u-1)$ $(u^{42}+u^{41}+\cdots-2496u+1081)$
c_6, c_7	(u^3-u^2+2u-1) $(-1-u+u^2+6u^3+9u^4+11u^5-2u^6-10u^7-25u^8-23u^9-3u^{10}+28u^{11}+48u^{12}+90u$ $(u^{25}+11u^{23}+\cdots+5u-4)$
c_8	u^3 $(-1+u+u^2+2u^3+3u^4+7u^5+2u^6+16u^7-u^8+25u^9-7u^{10}+30u^{11}-10u^{12}+28u^{13}-$ $(u^{25}+3u^{24}+\cdots+352u+128)$
c_9	(u^3-u^2+1) $(1-3u+3u^2+7u^4+27u^5-48u^6+52u^7+47u^8-11u^9-23u^{10}+46u^{11}+16u^{12}+14u^{13}-$ $(u^{25}-u^{23}+\cdots+797u+292)$
c_{10}	(u^3+u^2+2u+1) $(-1-u+u^2+6u^3+9u^4+11u^5-2u^6-10u^7-25u^8-23u^9-3u^{10}+28u^{11}+48u^{12}+90u$ $(u^{25}+11u^{23}+\cdots+5u-4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossings
c_1, c_4	$(64y^3-16y^2+8y-1)(64y^{25}+240y^{24}+\cdots+16y-1)$ $(y^{42}+19y^{41}+\cdots+26506988y+1168561)$
c_2, c_3, c_5 c_{11}	$(y-1)^3(y^{25}+11y^{24}+\cdots+3y-1)(y^{42}+27y^{41}+\cdots+26y^2+1)$
c_6, c_7, c_{10}	(y^3+3y^2+2y-1) $(-1+3y+5y^2-8y^3+25y^4+127y^5-4y^6-272y^7+429y^8+1813y^9+1297y^{10}-800y^{11}+$ $(y^{25}+22y^{24}+\cdots+241y-16)$
c_8	y^3 $(-1+3y+9y^2+16y^3+45y^4+139y^5+380y^6+828y^7+1465y^8+2173y^9+2745y^{10}+3000$ $(y^{25}+7y^{24}+\cdots-84992y-16384)$
c_9	(y^3-y^2+2y-1) $(-1+3y-23y^2-108y^3-167y^4+1231y^5-324y^6+6792y^7-3307y^8+9465y^9-2395y^{10}$ $(y^{25}-2y^{24}+\cdots+1188257y-85264)$