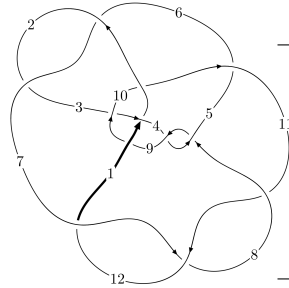
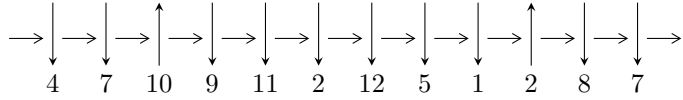


12n₀₇₉₇ (K12n₀₇₉₇)



A knot diagram¹

Linearized knot diagram



Solving Sequence

$$8,11 \xrightarrow{c_{11}} 12 \xrightarrow{c_7} 2,7 \xrightarrow{c_2} 3 \xrightarrow{c_{12}} 1 \xrightarrow{c_6} 6 \xrightarrow{c_5} 5 \xrightarrow{c_{10}} 10 \xrightarrow{c_3} 4 \xrightarrow{c_9} 9 \rightsquigarrow c_1, c_4, c_8$$

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 2.07960 \times 10^{91} u^{54} + 2.94820 \times 10^{91} u^{53} + \dots + 1.60845 \times 10^{93} b - 8.75300 \times 10^{93}, \\ 3.49565 \times 10^{93} u^{54} + 1.25650 \times 10^{94} u^{53} + \dots + 2.58961 \times 10^{95} a + 8.81973 \times 10^{95}, \\ u^{55} + 2u^{54} + \dots + 547u + 161 \rangle$$

$$I_2^u = \langle 2u^{25} - 88u^{24} + \dots + 46b - 59, -91u^{25} + 215u^{24} + \dots + 46a + 66, u^{26} - u^{25} + \dots + 4u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 81 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/maths/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\mathbf{I. } I_1^u = \langle 2.08 \times 10^{91} u^{54} + 2.95 \times 10^{91} u^{53} + \dots + 1.61 \times 10^{93} b - 8.75 \times 10^{93}, 3.50 \times 10^{93} u^{54} + 1.26 \times 10^{94} u^{53} + \dots + 2.59 \times 10^{95} a + 8.82 \times 10^{95}, u^{55} + 2u^{54} + \dots + 547u + 161 \rangle$$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.0134987u^{54} - 0.0485208u^{53} + \dots - 12.9886u - 3.40581 \\ -0.0129292u^{54} - 0.0183294u^{53} + \dots + 18.5763u + 5.44188 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.0187035u^{54} - 0.0547457u^{53} + \dots - 3.27141u - 0.392712 \\ -0.0151382u^{54} - 0.0181689u^{53} + \dots + 26.8425u + 7.78127 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.0211190u^{54} - 0.0418297u^{53} + \dots - 8.19248u + 0.487545 \\ 0.0160121u^{54} + 0.0367680u^{53} + \dots + 6.73323u - 0.603776 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.00510696u^{54} - 0.00506179u^{53} + \dots - 1.45925u - 0.116231 \\ 0.0160121u^{54} + 0.0367680u^{53} + \dots + 6.73323u - 0.603776 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.0168284u^{54} + 0.0417284u^{53} + \dots + 17.8209u + 3.35274 \\ 0.0107121u^{54} + 0.00850273u^{53} + \dots - 25.3078u - 6.73136 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.00524703u^{54} + 0.0251477u^{53} + \dots + 38.4021u + 9.27761 \\ 0.0246750u^{54} + 0.0506644u^{53} + \dots - 1.69128u - 1.40430 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0213925u^{54} + 0.0472947u^{53} + \dots + 8.93888u + 0.875826 \\ 0.00408564u^{54} - 0.00772075u^{53} + \dots - 24.1554u - 5.78092 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-0.0784770u^{54} - 0.193082u^{53} + \dots - 68.0047u - 10.6801$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{55} - 6u^{54} + \dots + 138u - 7$
c_2, c_6	$u^{55} - u^{54} + \dots - 6215u + 4261$
c_3	$u^{55} - 22u^{53} + \dots - 425241u + 68743$
c_4, c_8	$u^{55} + 3u^{54} + \dots + 40u + 8$
c_5	$u^{55} + u^{54} + \dots + 518u + 691$
c_7, c_{11}, c_{12}	$u^{55} + 2u^{54} + \dots + 547u + 161$
c_9	$u^{55} + 6u^{54} + \dots + 3961u + 547$
c_{10}	$u^{55} - 45u^{53} + \dots + 42944u + 11864$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{55} + 10y^{54} + \dots + 9314y - 49$
c_2, c_6	$y^{55} + 81y^{54} + \dots - 714727097y - 18156121$
c_3	$y^{55} - 44y^{54} + \dots + 161699281125y - 4725600049$
c_4, c_8	$y^{55} + 51y^{54} + \dots - 16448y - 64$
c_5	$y^{55} + 83y^{54} + \dots - 17632722y - 477481$
c_7, c_{11}, c_{12}	$y^{55} + 68y^{54} + \dots - 615593y - 25921$
c_9	$y^{55} + 24y^{54} + \dots - 5301057y - 299209$
c_{10}	$y^{55} - 90y^{54} + \dots + 3812472192y - 140754496$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.490040 + 0.753457I$ $a = -0.887738 - 0.559278I$ $b = 1.50685 - 0.03038I$	$6.13669 - 4.64981I$	$-5.28628 + 6.18804I$
$u = 0.490040 - 0.753457I$ $a = -0.887738 + 0.559278I$ $b = 1.50685 + 0.03038I$	$6.13669 + 4.64981I$	$-5.28628 - 6.18804I$
$u = 0.570071 + 0.997038I$ $a = 0.88532 + 1.33081I$ $b = -0.537901 + 0.521935I$	$-1.18456 - 2.16066I$	0
$u = 0.570071 - 0.997038I$ $a = 0.88532 - 1.33081I$ $b = -0.537901 - 0.521935I$	$-1.18456 + 2.16066I$	0
$u = 0.251956 + 0.785395I$ $a = -1.08299 - 1.33546I$ $b = 1.61042 - 0.04562I$	$9.54903 - 0.14815I$	$1.97076 + 0.45693I$
$u = 0.251956 - 0.785395I$ $a = -1.08299 + 1.33546I$ $b = 1.61042 + 0.04562I$	$9.54903 + 0.14815I$	$1.97076 - 0.45693I$
$u = -0.116882 + 1.178060I$ $a = 0.104386 - 0.227431I$ $b = -0.646640 - 0.042880I$	$2.57075 + 2.07006I$	0
$u = -0.116882 - 1.178060I$ $a = 0.104386 + 0.227431I$ $b = -0.646640 + 0.042880I$	$2.57075 - 2.07006I$	0
$u = -0.636334 + 1.002860I$ $a = 0.811613 - 0.985736I$ $b = -0.254278 - 1.303390I$	$-0.34669 + 2.38010I$	0
$u = -0.636334 - 1.002860I$ $a = 0.811613 + 0.985736I$ $b = -0.254278 + 1.303390I$	$-0.34669 - 2.38010I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.516300 + 0.607161I$ $a = 0.551523 + 0.748786I$ $b = -1.57349 - 0.23422I$	$5.55349 + 1.15098I$	$-7.02981 + 2.01750I$
$u = 0.516300 - 0.607161I$ $a = 0.551523 - 0.748786I$ $b = -1.57349 + 0.23422I$	$5.55349 - 1.15098I$	$-7.02981 - 2.01750I$
$u = 0.635640 + 0.408514I$ $a = -0.049474 - 0.375979I$ $b = 0.244897 + 0.404452I$	$3.21037 - 3.81410I$	$-3.00876 + 4.44084I$
$u = 0.635640 - 0.408514I$ $a = -0.049474 + 0.375979I$ $b = 0.244897 - 0.404452I$	$3.21037 + 3.81410I$	$-3.00876 - 4.44084I$
$u = 0.578207 + 0.479856I$ $a = 0.433436 + 0.026732I$ $b = -0.483722 + 0.114833I$	$3.53350 - 0.19360I$	$-3.73389 + 2.78818I$
$u = 0.578207 - 0.479856I$ $a = 0.433436 - 0.026732I$ $b = -0.483722 - 0.114833I$	$3.53350 + 0.19360I$	$-3.73389 - 2.78818I$
$u = 0.084715 + 0.743739I$ $a = -0.86276 - 2.38888I$ $b = 0.302921 + 0.216438I$	$1.83611 + 5.00955I$	$-1.41995 - 4.51640I$
$u = 0.084715 - 0.743739I$ $a = -0.86276 + 2.38888I$ $b = 0.302921 - 0.216438I$	$1.83611 - 5.00955I$	$-1.41995 + 4.51640I$
$u = -0.206657 + 0.671508I$ $a = -0.30812 + 1.43958I$ $b = -0.371827 + 1.206250I$	$1.53161 - 4.54582I$	$-1.70666 + 0.80391I$
$u = -0.206657 - 0.671508I$ $a = -0.30812 - 1.43958I$ $b = -0.371827 - 1.206250I$	$1.53161 + 4.54582I$	$-1.70666 - 0.80391I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.223556 + 0.606477I$ $a = 0.602584 + 1.250130I$ $b = -1.89077 + 0.29080I$	$8.94290 - 1.49383I$	$1.30346 + 4.21129I$
$u = 0.223556 - 0.606477I$ $a = 0.602584 - 1.250130I$ $b = -1.89077 - 0.29080I$	$8.94290 + 1.49383I$	$1.30346 - 4.21129I$
$u = -1.116550 + 0.829939I$ $a = -0.054400 + 0.756088I$ $b = 2.34708 + 0.06527I$	$12.4197 + 8.7555I$	0
$u = -1.116550 - 0.829939I$ $a = -0.054400 - 0.756088I$ $b = 2.34708 - 0.06527I$	$12.4197 - 8.7555I$	0
$u = -0.129598 + 1.407450I$ $a = -0.933650 - 0.404509I$ $b = 0.363613 + 1.022520I$	$4.96026 + 2.94833I$	0
$u = -0.129598 - 1.407450I$ $a = -0.933650 + 0.404509I$ $b = 0.363613 - 1.022520I$	$4.96026 - 2.94833I$	0
$u = -1.29784 + 0.63122I$ $a = -0.058295 - 0.824045I$ $b = -2.36846 - 0.46156I$	$11.71150 - 0.95890I$	0
$u = -1.29784 - 0.63122I$ $a = -0.058295 + 0.824045I$ $b = -2.36846 + 0.46156I$	$11.71150 + 0.95890I$	0
$u = -0.18355 + 1.46859I$ $a = 0.384347 - 0.500239I$ $b = -0.278834 - 0.427014I$	$4.72513 + 1.63928I$	0
$u = -0.18355 - 1.46859I$ $a = 0.384347 + 0.500239I$ $b = -0.278834 + 0.427014I$	$4.72513 - 1.63928I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.22442 + 1.46665I$ $a = -0.758599 - 0.218438I$ $b = 0.711269 + 0.025399I$	$9.77580 - 3.16441I$	0
$u = 0.22442 - 1.46665I$ $a = -0.758599 + 0.218438I$ $b = 0.711269 - 0.025399I$	$9.77580 + 3.16441I$	0
$u = 0.22595 + 1.46861I$ $a = 0.078711 + 0.724552I$ $b = -0.246015 - 0.635654I$	$9.28337 - 6.93920I$	0
$u = 0.22595 - 1.46861I$ $a = 0.078711 - 0.724552I$ $b = -0.246015 + 0.635654I$	$9.28337 + 6.93920I$	0
$u = -0.295289 + 0.365913I$ $a = 0.546011 - 1.002610I$ $b = -0.236263 - 0.861145I$	$-0.63078 + 1.39813I$	$-4.91291 - 6.55485I$
$u = -0.295289 - 0.365913I$ $a = 0.546011 + 1.002610I$ $b = -0.236263 + 0.861145I$	$-0.63078 - 1.39813I$	$-4.91291 + 6.55485I$
$u = -0.426697$ $a = 1.04155$ $b = 0.354185$	-0.877261	-10.1120
$u = 0.06992 + 1.64735I$ $a = -2.21340 + 0.12521I$ $b = 2.70602 - 0.87673I$	$17.0119 - 2.6386I$	0
$u = 0.06992 - 1.64735I$ $a = -2.21340 - 0.12521I$ $b = 2.70602 + 0.87673I$	$17.0119 + 2.6386I$	0
$u = 0.14782 + 1.66795I$ $a = -1.88593 - 0.44797I$ $b = 2.33419 - 0.02631I$	$13.66400 - 1.40536I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.14782 - 1.66795I$ $a = -1.88593 + 0.44797I$ $b = 2.33419 + 0.02631I$	$13.66400 + 1.40536I$	0
$u = -0.194738 + 0.240755I$ $a = 1.82364 + 2.49499I$ $b = 0.421348 - 0.103727I$	$-1.054960 - 0.149529I$	$-3.90095 - 3.89450I$
$u = -0.194738 - 0.240755I$ $a = 1.82364 - 2.49499I$ $b = 0.421348 + 0.103727I$	$-1.054960 + 0.149529I$	$-3.90095 + 3.89450I$
$u = 0.15421 + 1.68561I$ $a = 1.84022 + 0.35608I$ $b = -2.13772 + 0.11444I$	$14.7179 - 7.2096I$	0
$u = 0.15421 - 1.68561I$ $a = 1.84022 - 0.35608I$ $b = -2.13772 - 0.11444I$	$14.7179 + 7.2096I$	0
$u = 0.08151 + 1.71479I$ $a = 1.71136 + 0.13502I$ $b = -2.00460 + 0.60101I$	$18.6220 - 1.5785I$	0
$u = 0.08151 - 1.71479I$ $a = 1.71136 - 0.13502I$ $b = -2.00460 - 0.60101I$	$18.6220 + 1.5785I$	0
$u = -0.04620 + 1.72945I$ $a = -0.847700 + 0.629686I$ $b = 1.26083 - 1.76289I$	$10.49490 - 3.28765I$	0
$u = -0.04620 - 1.72945I$ $a = -0.847700 - 0.629686I$ $b = 1.26083 + 1.76289I$	$10.49490 + 3.28765I$	0
$u = 0.01411 + 1.75354I$ $a = 0.705957 - 0.124688I$ $b = -0.83820 + 1.26974I$	$11.23260 + 4.25408I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.01411 - 1.75354I$		
$a = 0.705957 + 0.124688I$	$11.23260 - 4.25408I$	0
$b = -0.83820 - 1.26974I$		
$u = -0.36581 + 1.72020I$		
$a = 1.56485 - 0.63201I$	$-18.7497 + 14.4065I$	0
$b = -2.36197 - 0.69629I$		
$u = -0.36581 - 1.72020I$		
$a = 1.56485 + 0.63201I$	$-18.7497 - 14.4065I$	0
$b = -2.36197 + 0.69629I$		
$u = -0.46563 + 1.76753I$		
$a = -1.33286 + 0.60148I$	$19.3972 + 5.7935I$	0
$b = 2.24415 + 0.96108I$		
$u = -0.46563 - 1.76753I$		
$a = -1.33286 - 0.60148I$	$19.3972 - 5.7935I$	0
$b = 2.24415 - 0.96108I$		

$$\text{II. } I_2^u = \langle 2u^{25} - 88u^{24} + \dots + 46b - 59, -91u^{25} + 215u^{24} + \dots + 46a + 66, u^{26} - u^{25} + \dots + 4u + 1 \rangle$$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.97826u^{25} - 4.67391u^{24} + \dots + 2.36957u - 1.43478 \\ -0.0434783u^{25} + 1.91304u^{24} + \dots + 6.47826u + 1.28261 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 3.63043u^{25} - 8.30435u^{24} + \dots - 1.86957u - 2.76087 \\ -1.13043u^{25} + 4.67391u^{24} + \dots + 8.50000u + 1.93478 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -3.23913u^{25} + 2.80435u^{24} + \dots - 13.1522u - 2.23913 \\ 0.652174u^{25} + 0.434783u^{24} + \dots + 2.69565u + 0.586957 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -2.58696u^{25} + 3.23913u^{24} + \dots - 10.4565u - 1.65217 \\ 0.652174u^{25} + 0.434783u^{24} + \dots + 2.69565u + 0.586957 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.543478u^{25} - 2.43478u^{24} + \dots - 4.95652u - 1.58696 \\ 1.52174u^{25} - 1.21739u^{24} + \dots + 2.52174u - 0.0434783 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.717391u^{25} + 0.760870u^{24} + \dots + 0.195652u + 0.652174 \\ -1.04348u^{25} + 4.84783u^{24} + \dots + 7.54348u + 2.36957 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{25} - 2u^{24} + \dots - 4u - 2 \\ 1.54348u^{25} - 1.32609u^{24} + \dots + 1.93478u - 0.0652174 \end{pmatrix}$$

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = \frac{55}{23}u^{25} - \frac{266}{23}u^{24} + \dots + \frac{1}{23}u - \frac{274}{23}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{26} - 9u^{25} + \dots - 3u + 1$
c_2	$u^{26} + 7u^{24} + \dots - 6u^2 + 1$
c_3	$u^{26} + u^{25} + \dots + 7u^2 + 1$
c_4	$u^{26} + 2u^{25} + \dots + 8u + 8$
c_5	$u^{26} + 18u^{24} + \dots + 155u + 19$
c_6	$u^{26} + 7u^{24} + \dots - 6u^2 + 1$
c_7	$u^{26} + u^{25} + \dots - 4u + 1$
c_8	$u^{26} - 2u^{25} + \dots - 8u + 8$
c_9	$u^{26} + u^{25} + \dots - 6u + 1$
c_{10}	$u^{26} - 3u^{25} + \dots - 16u + 8$
c_{11}, c_{12}	$u^{26} - u^{25} + \dots + 4u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{26} - y^{25} + \dots - 3y + 1$
c_2, c_6	$y^{26} + 14y^{25} + \dots - 12y + 1$
c_3	$y^{26} - 7y^{25} + \dots + 14y + 1$
c_4, c_8	$y^{26} + 20y^{25} + \dots + 768y + 64$
c_5	$y^{26} + 36y^{25} + \dots - 3239y + 361$
c_7, c_{11}, c_{12}	$y^{26} + 29y^{25} + \dots + 8y + 1$
c_9	$y^{26} + y^{25} + \dots + 72y + 1$
c_{10}	$y^{26} - 17y^{25} + \dots + 448y + 64$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.531767 + 0.924726I$		
$a = 0.95660 - 1.36911I$	$-1.60523 + 2.14875I$	$-18.0536 - 1.1189I$
$b = -0.314180 - 0.738123I$		
$u = -0.531767 - 0.924726I$		
$a = 0.95660 + 1.36911I$	$-1.60523 - 2.14875I$	$-18.0536 + 1.1189I$
$b = -0.314180 + 0.738123I$		
$u = -0.155520 + 1.184120I$		
$a = -0.297405 - 0.783721I$	$7.99337 + 3.58193I$	$0.53526 - 3.16458I$
$b = 0.964857 + 0.167882I$		
$u = -0.155520 - 1.184120I$		
$a = -0.297405 + 0.783721I$	$7.99337 - 3.58193I$	$0.53526 + 3.16458I$
$b = 0.964857 - 0.167882I$		
$u = -0.278958 + 0.724589I$		
$a = 0.996507 + 0.135576I$	$6.25488 - 1.92335I$	$-0.90199 + 3.47352I$
$b = -1.332660 + 0.342920I$		
$u = -0.278958 - 0.724589I$		
$a = 0.996507 - 0.135576I$	$6.25488 + 1.92335I$	$-0.90199 - 3.47352I$
$b = -1.332660 - 0.342920I$		
$u = 0.930098 + 0.802820I$		
$a = 0.474244 + 0.914716I$	$0.53288 - 3.32357I$	$-2.37998 + 5.27576I$
$b = -0.060489 + 1.338220I$		
$u = 0.930098 - 0.802820I$		
$a = 0.474244 - 0.914716I$	$0.53288 + 3.32357I$	$-2.37998 - 5.27576I$
$b = -0.060489 - 1.338220I$		
$u = -0.028031 + 1.276740I$		
$a = -1.00372 - 1.53912I$	$3.91194 + 5.18636I$	$-1.06606 - 5.83088I$
$b = 0.172185 + 0.709515I$		
$u = -0.028031 - 1.276740I$		
$a = -1.00372 + 1.53912I$	$3.91194 - 5.18636I$	$-1.06606 + 5.83088I$
$b = 0.172185 - 0.709515I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.499919 + 0.469085I$ $a = 0.20979 + 1.55488I$ $b = -1.84433 + 0.13564I$	$8.18136 + 0.02481I$	$-4.35136 - 0.00061I$
$u = 0.499919 - 0.469085I$ $a = 0.20979 - 1.55488I$ $b = -1.84433 - 0.13564I$	$8.18136 - 0.02481I$	$-4.35136 + 0.00061I$
$u = -0.075484 + 1.330840I$ $a = -0.140603 + 1.168060I$ $b = 0.453510 - 0.455888I$	$2.64528 + 0.49890I$	$-3.27837 + 0.91499I$
$u = -0.075484 - 1.330840I$ $a = -0.140603 - 1.168060I$ $b = 0.453510 + 0.455888I$	$2.64528 - 0.49890I$	$-3.27837 - 0.91499I$
$u = 0.251257 + 1.313020I$ $a = -0.585820 - 0.404742I$ $b = 1.356040 + 0.081601I$	$11.21190 - 2.85234I$	$3.32067 + 2.75617I$
$u = 0.251257 - 1.313020I$ $a = -0.585820 + 0.404742I$ $b = 1.356040 - 0.081601I$	$11.21190 + 2.85234I$	$3.32067 - 2.75617I$
$u = -0.15611 + 1.42827I$ $a = -0.770422 + 0.144555I$ $b = 0.483139 + 0.795468I$	$4.00781 + 2.36685I$	$-6.55320 - 2.61997I$
$u = -0.15611 - 1.42827I$ $a = -0.770422 - 0.144555I$ $b = 0.483139 - 0.795468I$	$4.00781 - 2.36685I$	$-6.55320 + 2.61997I$
$u = 0.017031 + 0.451525I$ $a = -1.36632 + 2.82567I$ $b = -0.178221 + 0.877402I$	$0.91017 - 5.01353I$	$-11.92997 + 6.89384I$
$u = 0.017031 - 0.451525I$ $a = -1.36632 - 2.82567I$ $b = -0.178221 - 0.877402I$	$0.91017 + 5.01353I$	$-11.92997 - 6.89384I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.20761 + 1.53663I$ $a = -0.015459 + 0.437458I$ $b = -0.167651 - 1.040590I$	$8.40386 - 6.76860I$	$-5.77206 + 3.99737I$
$u = 0.20761 - 1.53663I$ $a = -0.015459 - 0.437458I$ $b = -0.167651 + 1.040590I$	$8.40386 + 6.76860I$	$-5.77206 - 3.99737I$
$u = 0.09600 + 1.68071I$ $a = -1.97843 - 0.05589I$ $b = 2.47796 - 0.70763I$	$16.3295 - 2.2416I$	$-3.78517 + 0.I$
$u = 0.09600 - 1.68071I$ $a = -1.97843 + 0.05589I$ $b = 2.47796 + 0.70763I$	$16.3295 + 2.2416I$	$-3.78517 + 0.I$
$u = -0.276043 + 0.143761I$ $a = -1.97897 - 2.35981I$ $b = -0.510160 - 0.524360I$	$-1.33535 + 0.64782I$	$-10.78419 - 5.87862I$
$u = -0.276043 - 0.143761I$ $a = -1.97897 + 2.35981I$ $b = -0.510160 + 0.524360I$	$-1.33535 - 0.64782I$	$-10.78419 + 5.87862I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{26} - 9u^{25} + \dots - 3u + 1)(u^{55} - 6u^{54} + \dots + 138u - 7)$
c_2	$(u^{26} + 7u^{24} + \dots - 6u^2 + 1)(u^{55} - u^{54} + \dots - 6215u + 4261)$
c_3	$(u^{26} + u^{25} + \dots + 7u^2 + 1)(u^{55} - 22u^{53} + \dots - 425241u + 68743)$
c_4	$(u^{26} + 2u^{25} + \dots + 8u + 8)(u^{55} + 3u^{54} + \dots + 40u + 8)$
c_5	$(u^{26} + 18u^{24} + \dots + 155u + 19)(u^{55} + u^{54} + \dots + 518u + 691)$
c_6	$(u^{26} + 7u^{24} + \dots - 6u^2 + 1)(u^{55} - u^{54} + \dots - 6215u + 4261)$
c_7	$(u^{26} + u^{25} + \dots - 4u + 1)(u^{55} + 2u^{54} + \dots + 547u + 161)$
c_8	$(u^{26} - 2u^{25} + \dots - 8u + 8)(u^{55} + 3u^{54} + \dots + 40u + 8)$
c_9	$(u^{26} + u^{25} + \dots - 6u + 1)(u^{55} + 6u^{54} + \dots + 3961u + 547)$
c_{10}	$(u^{26} - 3u^{25} + \dots - 16u + 8)(u^{55} - 45u^{53} + \dots + 42944u + 11864)$
c_{11}, c_{12}	$(u^{26} - u^{25} + \dots + 4u + 1)(u^{55} + 2u^{54} + \dots + 547u + 161)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{26} - y^{25} + \dots - 3y + 1)(y^{55} + 10y^{54} + \dots + 9314y - 49)$
c_2, c_6	$(y^{26} + 14y^{25} + \dots - 12y + 1)$ $\cdot (y^{55} + 81y^{54} + \dots - 714727097y - 18156121)$
c_3	$(y^{26} - 7y^{25} + \dots + 14y + 1)$ $\cdot (y^{55} - 44y^{54} + \dots + 161699281125y - 4725600049)$
c_4, c_8	$(y^{26} + 20y^{25} + \dots + 768y + 64)(y^{55} + 51y^{54} + \dots - 16448y - 64)$
c_5	$(y^{26} + 36y^{25} + \dots - 3239y + 361)$ $\cdot (y^{55} + 83y^{54} + \dots - 17632722y - 477481)$
c_7, c_{11}, c_{12}	$(y^{26} + 29y^{25} + \dots + 8y + 1)(y^{55} + 68y^{54} + \dots - 615593y - 25921)$
c_9	$(y^{26} + y^{25} + \dots + 72y + 1)(y^{55} + 24y^{54} + \dots - 5301057y - 299209)$
c_{10}	$(y^{26} - 17y^{25} + \dots + 448y + 64)$ $\cdot (y^{55} - 90y^{54} + \dots + 3812472192y - 140754496)$