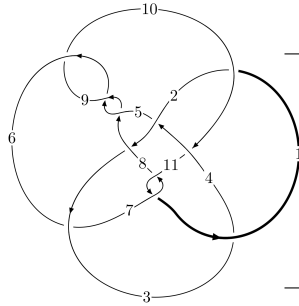
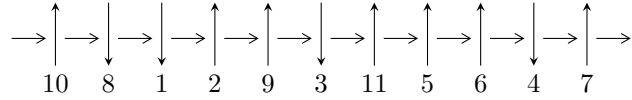


11a₂₅₅ (K11a₂₅₅)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 1.80659 \times 10^{126} u^{87} + 6.62202 \times 10^{126} u^{86} + \dots + 8.45954 \times 10^{125} b - 6.83566 \times 10^{124}, \\ 6.92943 \times 10^{125} u^{87} + 2.71684 \times 10^{125} u^{86} + \dots + 8.45954 \times 10^{125} a + 3.63682 \times 10^{126}, u^{88} + 3u^{87} + \dots + 12u^{86} \rangle$$

$$I_2^u = \langle 6u^{16} - 5u^{15} + \dots + b + 9, -4u^{16} + 3u^{15} + \dots + a - 3, u^{17} - 2u^{16} + \dots + 2u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 105 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.

$$\mathbf{I. } I_1^u = \langle 1.81 \times 10^{126} u^{87} + 6.62 \times 10^{126} u^{86} + \dots + 8.46 \times 10^{125} b - 6.84 \times 10^{124}, 6.93 \times 10^{125} u^{87} + 2.72 \times 10^{125} u^{86} + \dots + 8.46 \times 10^{125} a + 3.64 \times 10^{126}, u^{88} + 3u^{87} + \dots + 12u - 1 \rangle$$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.819125u^{87} - 0.321157u^{86} + \dots + 16.0138u - 4.29907 \\ -2.13556u^{87} - 7.82787u^{86} + \dots + 22.9711u + 0.0808042 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.129180u^{87} + 0.672098u^{86} + \dots + 3.50283u - 3.01968 \\ -2.64974u^{87} - 8.65151u^{86} + \dots - 3.14880u + 2.43678 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2.08531u^{87} - 5.49795u^{86} + \dots + 25.3255u - 0.354318 \\ -1.84736u^{87} - 5.50308u^{86} + \dots + 87.1798u - 7.04699 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -1.83766u^{87} - 6.94809u^{86} + \dots - 62.8333u + 11.5382 \\ -0.322083u^{87} - 1.44486u^{86} + \dots + 69.6894u - 6.79609 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -0.332721u^{87} - 0.302475u^{86} + \dots + 27.5489u - 5.01410 \\ -2.62197u^{87} - 7.84655u^{86} + \dots + 11.4361u + 0.795836 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.00418543u^{87} - 0.339575u^{86} + \dots + 87.8936u - 8.51572 \\ -0.524156u^{87} + 1.20963u^{86} + \dots + 25.6387u - 2.61072 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.00418543u^{87} - 0.339575u^{86} + \dots + 87.8936u - 8.51572 \\ -0.524156u^{87} + 1.20963u^{86} + \dots + 25.6387u - 2.61072 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-1.27706u^{87} - 1.69690u^{86} + \dots + 382.685u - 26.5055$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{88} + 9u^{87} + \dots - 24u - 1$
c_2	$u^{88} - u^{87} + \dots + 1530u - 73$
c_3	$u^{88} + 2u^{87} + \dots + 1392u + 133$
c_4	$u^{88} - 3u^{87} + \dots + 6998u + 2363$
c_5, c_8, c_9	$u^{88} - 3u^{87} + \dots - 12u - 1$
c_6	$u^{88} - u^{87} + \dots + 9888u - 1216$
c_7, c_{11}	$u^{88} + 26u^{86} + \dots + 35u - 19$
c_{10}	$u^{88} + 5u^{87} + \dots + 32u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{88} - 15y^{87} + \dots + 48y + 1$
c_2	$y^{88} + 17y^{87} + \dots + 439816y + 5329$
c_3	$y^{88} - 16y^{87} + \dots - 1724598y + 17689$
c_4	$y^{88} - 23y^{87} + \dots - 69312708y + 5583769$
c_5, c_8, c_9	$y^{88} - 87y^{87} + \dots + 6y + 1$
c_6	$y^{88} - 7y^{87} + \dots - 41894912y + 1478656$
c_7, c_{11}	$y^{88} + 52y^{87} + \dots + 8009y + 361$
c_{10}	$y^{88} - 9y^{87} + \dots - 42y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.461471 + 0.841006I$	$0.94916 - 7.07982I$	0
$a = 0.528338 + 0.458503I$		
$b = -1.067760 + 0.659062I$		
$u = -0.461471 - 0.841006I$	$0.94916 + 7.07982I$	0
$a = 0.528338 - 0.458503I$		
$b = -1.067760 - 0.659062I$		
$u = 0.461917 + 0.839983I$	$-2.63728 + 13.13360I$	0
$a = 0.521449 - 0.561797I$		
$b = -1.15881 - 0.867775I$		
$u = 0.461917 - 0.839983I$	$-2.63728 - 13.13360I$	0
$a = 0.521449 + 0.561797I$		
$b = -1.15881 + 0.867775I$		
$u = 0.716320 + 0.759777I$	$-1.90928 - 7.75289I$	0
$a = -0.096496 - 0.698922I$		
$b = -0.910905 + 0.530988I$		
$u = 0.716320 - 0.759777I$	$-1.90928 + 7.75289I$	0
$a = -0.096496 + 0.698922I$		
$b = -0.910905 - 0.530988I$		
$u = -0.747640 + 0.738917I$	$1.75411 + 1.70043I$	0
$a = 0.185794 + 0.644451I$		
$b = -0.800040 - 0.321449I$		
$u = -0.747640 - 0.738917I$	$1.75411 - 1.70043I$	0
$a = 0.185794 - 0.644451I$		
$b = -0.800040 + 0.321449I$		
$u = 0.462797 + 0.784939I$	$-4.87171 + 1.98745I$	0
$a = 0.713999 - 0.375007I$		
$b = -0.575391 - 0.639112I$		
$u = 0.462797 - 0.784939I$	$-4.87171 - 1.98745I$	0
$a = 0.713999 + 0.375007I$		
$b = -0.575391 + 0.639112I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.661971 + 0.926980I$		
$a = -0.0387633 + 0.1080350I$	$-4.12384 + 3.33457I$	0
$b = 0.248682 + 0.443728I$		
$u = 0.661971 - 0.926980I$		
$a = -0.0387633 - 0.1080350I$	$-4.12384 - 3.33457I$	0
$b = 0.248682 - 0.443728I$		
$u = -0.708244 + 0.478843I$		
$a = -0.296258 - 0.177834I$	$-0.49529 - 4.30405I$	0
$b = 0.853123 - 0.895770I$		
$u = -0.708244 - 0.478843I$		
$a = -0.296258 + 0.177834I$	$-0.49529 + 4.30405I$	0
$b = 0.853123 + 0.895770I$		
$u = 0.830448 + 0.798387I$		
$a = 0.0650164 - 0.0284208I$	$-4.10019 + 3.25868I$	0
$b = -0.131884 + 0.335388I$		
$u = 0.830448 - 0.798387I$		
$a = 0.0650164 + 0.0284208I$	$-4.10019 - 3.25868I$	0
$b = -0.131884 - 0.335388I$		
$u = 1.210430 + 0.168812I$		
$a = 0.657008 - 0.139362I$	$1.12675 + 3.01989I$	0
$b = 0.238030 + 0.541756I$		
$u = 1.210430 - 0.168812I$		
$a = 0.657008 + 0.139362I$	$1.12675 - 3.01989I$	0
$b = 0.238030 - 0.541756I$		
$u = -1.242660 + 0.064543I$		
$a = 0.356767 + 0.064742I$	$-0.78403 + 3.10651I$	0
$b = 0.259039 + 1.176710I$		
$u = -1.242660 - 0.064543I$		
$a = 0.356767 - 0.064742I$	$-0.78403 - 3.10651I$	0
$b = 0.259039 - 1.176710I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.752023 + 0.025277I$ $a = 1.248130 - 0.539713I$ $b = -0.373499 + 0.173438I$	$1.43199 - 0.10841I$	$9.03393 - 1.67726I$
$u = -0.752023 - 0.025277I$ $a = 1.248130 + 0.539713I$ $b = -0.373499 - 0.173438I$	$1.43199 + 0.10841I$	$9.03393 + 1.67726I$
$u = 1.265790 + 0.009736I$ $a = 2.61060 + 0.86684I$ $b = -1.59560 - 0.66566I$	$-0.88817 - 4.15422I$	0
$u = 1.265790 - 0.009736I$ $a = 2.61060 - 0.86684I$ $b = -1.59560 + 0.66566I$	$-0.88817 + 4.15422I$	0
$u = -0.083085 + 0.724734I$ $a = 1.158860 + 0.095466I$ $b = 0.431630 + 0.250640I$	$-2.63186 + 0.30603I$	$-4.47610 + 0.84684I$
$u = -0.083085 - 0.724734I$ $a = 1.158860 - 0.095466I$ $b = 0.431630 - 0.250640I$	$-2.63186 - 0.30603I$	$-4.47610 - 0.84684I$
$u = -0.406517 + 0.596845I$ $a = -0.134387 - 0.848786I$ $b = 1.080960 - 0.597180I$	$1.08733 - 1.99106I$	$6.09235 + 1.36477I$
$u = -0.406517 - 0.596845I$ $a = -0.134387 + 0.848786I$ $b = 1.080960 + 0.597180I$	$1.08733 + 1.99106I$	$6.09235 - 1.36477I$
$u = -1.28104$ $a = 1.92302$ $b = -1.09485$	2.27296	0
$u = -1.279570 + 0.203713I$ $a = 1.06056 + 0.94410I$ $b = -0.895929 - 0.812012I$	$1.161850 - 0.746665I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.279570 - 0.203713I$ $a = 1.06056 - 0.94410I$ $b = -0.895929 + 0.812012I$	$1.161850 + 0.746665I$	0
$u = -0.322097 + 0.620023I$ $a = 0.315508 - 0.621708I$ $b = 0.946527 - 0.186707I$	$0.94922 - 1.67367I$	$6.07995 + 4.98191I$
$u = -0.322097 - 0.620023I$ $a = 0.315508 + 0.621708I$ $b = 0.946527 + 0.186707I$	$0.94922 + 1.67367I$	$6.07995 - 4.98191I$
$u = 0.332971 + 0.562296I$ $a = -0.68132 + 1.26827I$ $b = 1.05330 + 1.02301I$	$0.17356 + 4.65502I$	$2.68890 - 10.30148I$
$u = 0.332971 - 0.562296I$ $a = -0.68132 - 1.26827I$ $b = 1.05330 - 1.02301I$	$0.17356 - 4.65502I$	$2.68890 + 10.30148I$
$u = 1.349230 + 0.081552I$ $a = -0.072511 - 1.110690I$ $b = -0.00272 + 1.71935I$	$3.28529 + 3.22075I$	0
$u = 1.349230 - 0.081552I$ $a = -0.072511 + 1.110690I$ $b = -0.00272 - 1.71935I$	$3.28529 - 3.22075I$	0
$u = 1.352360 + 0.095803I$ $a = -2.37770 - 0.49924I$ $b = 0.479377 + 0.433404I$	$0.04809 + 6.65339I$	0
$u = 1.352360 - 0.095803I$ $a = -2.37770 + 0.49924I$ $b = 0.479377 - 0.433404I$	$0.04809 - 6.65339I$	0
$u = 0.511484 + 0.381620I$ $a = 1.12929 - 2.15831I$ $b = -0.702835 - 0.184361I$	$-1.90539 + 5.37165I$	$4.99409 - 10.30612I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.511484 - 0.381620I$ $a = 1.12929 + 2.15831I$ $b = -0.702835 + 0.184361I$	$-1.90539 - 5.37165I$	$4.99409 + 10.30612I$
$u = 0.164196 + 0.612873I$ $a = 0.375315 + 0.193004I$ $b = -1.129360 + 0.356278I$	$-3.27941 - 2.28675I$	$-3.82551 + 1.37856I$
$u = 0.164196 - 0.612873I$ $a = 0.375315 - 0.193004I$ $b = -1.129360 - 0.356278I$	$-3.27941 + 2.28675I$	$-3.82551 - 1.37856I$
$u = -1.382080 + 0.113573I$ $a = 0.23821 + 1.80685I$ $b = -0.56801 - 2.23826I$	$0.79244 - 7.21107I$	0
$u = -1.382080 - 0.113573I$ $a = 0.23821 - 1.80685I$ $b = -0.56801 + 2.23826I$	$0.79244 + 7.21107I$	0
$u = 1.391480 + 0.005846I$ $a = -1.256520 + 0.038074I$ $b = 0.961160 - 1.030150I$	$4.81925 - 2.14563I$	0
$u = 1.391480 - 0.005846I$ $a = -1.256520 - 0.038074I$ $b = 0.961160 + 1.030150I$	$4.81925 + 2.14563I$	0
$u = -1.367910 + 0.282397I$ $a = -0.943677 - 0.996974I$ $b = 1.134880 + 0.127270I$	$5.06894 - 1.03566I$	0
$u = -1.367910 - 0.282397I$ $a = -0.943677 + 0.996974I$ $b = 1.134880 - 0.127270I$	$5.06894 + 1.03566I$	0
$u = -1.411040 + 0.057384I$ $a = -1.90492 + 0.51638I$ $b = 1.046140 + 0.137041I$	$5.63533 - 2.97696I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.411040 - 0.057384I$ $a = -1.90492 - 0.51638I$ $b = 1.046140 - 0.137041I$	$5.63533 + 2.97696I$	0
$u = -1.43441 + 0.20928I$ $a = -2.21776 + 0.04987I$ $b = 1.41019 - 1.20573I$	$5.87411 - 7.49299I$	0
$u = -1.43441 - 0.20928I$ $a = -2.21776 - 0.04987I$ $b = 1.41019 + 1.20573I$	$5.87411 + 7.49299I$	0
$u = 1.45850 + 0.22546I$ $a = -1.93667 + 0.23400I$ $b = 1.62738 + 0.88334I$	$7.10229 + 5.03178I$	0
$u = 1.45850 - 0.22546I$ $a = -1.93667 - 0.23400I$ $b = 1.62738 - 0.88334I$	$7.10229 - 5.03178I$	0
$u = 1.46091 + 0.26784I$ $a = -1.41901 + 0.35326I$ $b = 1.32346 + 0.58187I$	$6.71196 + 5.09265I$	0
$u = 1.46091 - 0.26784I$ $a = -1.41901 - 0.35326I$ $b = 1.32346 - 0.58187I$	$6.71196 - 5.09265I$	0
$u = 0.463199 + 0.202675I$ $a = -0.925640 - 0.568827I$ $b = 0.895298 + 0.761077I$	$0.58871 + 2.37016I$	$4.17793 + 0.20978I$
$u = 0.463199 - 0.202675I$ $a = -0.925640 + 0.568827I$ $b = 0.895298 - 0.761077I$	$0.58871 - 2.37016I$	$4.17793 - 0.20978I$
$u = -1.49052 + 0.12670I$ $a = -2.00668 + 0.39222I$ $b = 1.61947 - 0.73656I$	$7.08647 - 3.90826I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.49052 - 0.12670I$ $a = -2.00668 - 0.39222I$ $b = 1.61947 + 0.73656I$	$7.08647 + 3.90826I$	0
$u = -1.49094 + 0.14407I$ $a = 1.31374 + 0.79966I$ $b = -0.672972 + 0.541325I$	$4.61143 - 7.37584I$	0
$u = -1.49094 - 0.14407I$ $a = 1.31374 - 0.79966I$ $b = -0.672972 - 0.541325I$	$4.61143 + 7.37584I$	0
$u = -1.51168 + 0.27680I$ $a = 1.57883 + 0.09561I$ $b = -0.966303 + 0.625481I$	$1.55133 - 5.83848I$	0
$u = -1.51168 - 0.27680I$ $a = 1.57883 - 0.09561I$ $b = -0.966303 - 0.625481I$	$1.55133 + 5.83848I$	0
$u = -1.51194 + 0.30714I$ $a = 1.90269 + 0.09005I$ $b = -1.45359 + 1.01576I$	$3.7463 - 17.3074I$	0
$u = -1.51194 - 0.30714I$ $a = 1.90269 - 0.09005I$ $b = -1.45359 - 1.01576I$	$3.7463 + 17.3074I$	0
$u = 1.51283 + 0.30406I$ $a = 1.80560 - 0.17118I$ $b = -1.39154 - 0.78176I$	$7.34238 + 11.23930I$	0
$u = 1.51283 - 0.30406I$ $a = 1.80560 + 0.17118I$ $b = -1.39154 + 0.78176I$	$7.34238 - 11.23930I$	0
$u = 1.53850 + 0.17987I$ $a = -1.73418 - 0.42086I$ $b = 1.54927 + 1.11382I$	$6.81415 + 6.82656I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.53850 - 0.17987I$ $a = -1.73418 + 0.42086I$ $b = 1.54927 - 1.11382I$	$6.81415 - 6.82656I$	0
$u = -0.050133 + 0.441148I$ $a = 0.993692 - 0.507935I$ $b = -0.303771 - 0.868150I$	$-1.03837 - 1.54696I$	$-1.67898 + 4.77723I$
$u = -0.050133 - 0.441148I$ $a = 0.993692 + 0.507935I$ $b = -0.303771 + 0.868150I$	$-1.03837 + 1.54696I$	$-1.67898 - 4.77723I$
$u = 1.55518 + 0.14824I$ $a = 1.208090 - 0.434884I$ $b = -0.896135 - 0.279463I$	$9.64122 + 1.15165I$	0
$u = 1.55518 - 0.14824I$ $a = 1.208090 + 0.434884I$ $b = -0.896135 + 0.279463I$	$9.64122 - 1.15165I$	0
$u = -0.040036 + 0.423083I$ $a = -2.16221 - 2.72595I$ $b = 0.223065 - 0.923326I$	$-4.35734 - 4.93840I$	$-7.58655 + 6.46522I$
$u = -0.040036 - 0.423083I$ $a = -2.16221 + 2.72595I$ $b = 0.223065 + 0.923326I$	$-4.35734 + 4.93840I$	$-7.58655 - 6.46522I$
$u = -1.55024 + 0.32691I$ $a = -0.964062 + 0.135780I$ $b = 0.779113 - 0.898123I$	$2.86988 - 7.90451I$	0
$u = -1.55024 - 0.32691I$ $a = -0.964062 - 0.135780I$ $b = 0.779113 + 0.898123I$	$2.86988 + 7.90451I$	0
$u = 0.138202 + 0.386589I$ $a = 0.686542 + 1.075090I$ $b = -0.77356 + 1.44194I$	$-4.10700 + 5.44401I$	$-7.49868 - 9.59248I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.138202 - 0.386589I$ $a = 0.686542 - 1.075090I$ $b = -0.77356 - 1.44194I$	$-4.10700 - 5.44401I$	$-7.49868 + 9.59248I$
$u = -1.59892 + 0.13692I$ $a = 1.000610 + 0.377588I$ $b = -0.984883 + 0.138127I$	$6.15553 + 4.54274I$	0
$u = -1.59892 - 0.13692I$ $a = 1.000610 - 0.377588I$ $b = -0.984883 - 0.138127I$	$6.15553 - 4.54274I$	0
$u = 0.142949 + 0.365957I$ $a = 1.46432 + 0.58792I$ $b = 0.834993 - 0.548206I$	$0.45850 - 1.90438I$	$4.87683 + 2.73751I$
$u = 0.142949 - 0.365957I$ $a = 1.46432 - 0.58792I$ $b = 0.834993 + 0.548206I$	$0.45850 + 1.90438I$	$4.87683 - 2.73751I$
$u = 1.64753$ $a = 1.65458$ $b = -0.774179$	10.0236	0
$u = 0.178255 + 0.115095I$ $a = -3.73900 - 2.62365I$ $b = 0.794927 + 0.470433I$	$0.40811 + 2.17817I$	$5.56775 - 5.52206I$
$u = 0.178255 - 0.115095I$ $a = -3.73900 + 2.62365I$ $b = 0.794927 - 0.470433I$	$0.40811 - 2.17817I$	$5.56775 + 5.52206I$

II.

$$I_2^u = \langle 6u^{16} - 5u^{15} + \dots + b + 9, -4u^{16} + 3u^{15} + \dots + a - 3, u^{17} - 2u^{16} + \dots + 2u - 1 \rangle$$

(i) Arc colorings

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

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

$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 4u^{16} - 3u^{15} + \dots - 6u + 3 \\ -6u^{16} + 5u^{15} + \dots + 2u - 9 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 9u^{16} - 6u^{15} + \dots - 11u + 8 \\ -9u^{16} + 6u^{15} + \dots + 6u - 11 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -7u^{16} + 57u^{14} + \dots + 20u + 5 \\ 8u^{16} - 7u^{15} + \dots - 5u + 6 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -3u^{16} + 10u^{15} + \dots - 14u - 14 \\ -2u^{15} + 3u^{14} + \dots + 8u^2 + 4u \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 6u^{16} - 4u^{15} + \dots - 8u + 5 \\ -8u^{16} + 6u^{15} + \dots + 4u - 11 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 9u^{16} - 9u^{15} + \dots + 2u + 15 \\ -3u^{15} + u^{14} + \dots + 8u + 5 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 9u^{16} - 9u^{15} + \dots + 2u + 15 \\ -3u^{15} + u^{14} + \dots + 8u + 5 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $34u^{16} - 33u^{15} - 269u^{14} + 269u^{13} + 827u^{12} - 928u^{11} - 1263u^{10} + 1777u^9 + 1168u^8 - 2053u^7 - 1041u^6 + 1333u^5 + 877u^4 - 331u^3 - 342u^2 - 15u + 54$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} - 2u^{16} + \dots - 4u - 1$
c_2	$u^{17} - 3u^{15} + \dots + 2u + 1$
c_3	$u^{17} + 9u^{16} + \dots + 12u + 1$
c_4	$u^{17} - 8u^{16} + \dots + 10u - 1$
c_5	$u^{17} - 2u^{16} + \dots + 2u - 1$
c_6	$u^{17} - 2u^{16} + \dots + 2u - 1$
c_7	$u^{17} - u^{16} + \dots + u - 1$
c_8, c_9	$u^{17} + 2u^{16} + \dots + 2u + 1$
c_{10}	$u^{17} + 4u^{16} + \dots + 2u - 1$
c_{11}	$u^{17} + u^{16} + \dots + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 14y^{16} + \dots + 12y - 1$
c_2	$y^{17} - 6y^{16} + \dots - 8y^2 - 1$
c_3	$y^{17} + y^{16} + \dots + 18y - 1$
c_4	$y^{17} + 2y^{16} + \dots + 4y - 1$
c_5, c_8, c_9	$y^{17} - 18y^{16} + \dots + 18y - 1$
c_6	$y^{17} + 6y^{16} + \dots + 12y - 1$
c_7, c_{11}	$y^{17} + 9y^{16} + \dots - 13y - 1$
c_{10}	$y^{17} - 12y^{16} + \dots + 14y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.196410 + 0.042923I$		
$a = 0.307258 + 0.955570I$	$2.31141 - 2.16263I$	$6.33291 + 1.14130I$
$b = 0.193767 - 1.133430I$		
$u = -1.196410 - 0.042923I$		
$a = 0.307258 - 0.955570I$	$2.31141 + 2.16263I$	$6.33291 - 1.14130I$
$b = 0.193767 + 1.133430I$		
$u = -0.699765 + 0.361992I$		
$a = -0.694115 - 1.124900I$	$1.024420 + 0.934539I$	$3.42338 - 2.45300I$
$b = 0.506823 + 0.381587I$		
$u = -0.699765 - 0.361992I$		
$a = -0.694115 + 1.124900I$	$1.024420 - 0.934539I$	$3.42338 + 2.45300I$
$b = 0.506823 - 0.381587I$		
$u = 0.788709 + 0.955075I$		
$a = -0.141999 + 0.205787I$	$-3.91587 + 3.42072I$	$20.1307 - 16.0266I$
$b = 0.356005 + 0.214476I$		
$u = 0.788709 - 0.955075I$		
$a = -0.141999 - 0.205787I$	$-3.91587 - 3.42072I$	$20.1307 + 16.0266I$
$b = 0.356005 - 0.214476I$		
$u = 1.296440 + 0.017393I$		
$a = 1.87829 - 0.94667I$	$-0.09550 + 5.07949I$	$3.41161 - 6.03160I$
$b = -0.641473 + 1.171170I$		
$u = 1.296440 - 0.017393I$		
$a = 1.87829 + 0.94667I$	$-0.09550 - 5.07949I$	$3.41161 + 6.03160I$
$b = -0.641473 - 1.171170I$		
$u = -0.380635 + 0.432969I$		
$a = -0.626410 - 0.579486I$	$0.39343 - 3.18951I$	$2.48922 + 8.07163I$
$b = 1.05773 - 0.95107I$		
$u = -0.380635 - 0.432969I$		
$a = -0.626410 + 0.579486I$	$0.39343 + 3.18951I$	$2.48922 - 8.07163I$
$b = 1.05773 + 0.95107I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.46863 + 0.19401I$ $a = -2.06395 - 0.17330I$ $b = 1.66804 + 1.07306I$	$6.49554 + 5.64721I$	$4.24800 - 5.28734I$
$u = 1.46863 - 0.19401I$ $a = -2.06395 + 0.17330I$ $b = 1.66804 - 1.07306I$	$6.49554 - 5.64721I$	$4.24800 + 5.28734I$
$u = -1.50073 + 0.18378I$ $a = -1.184810 + 0.076406I$ $b = 0.662272 - 0.912764I$	$3.66769 - 6.66143I$	$4.22453 + 5.17747I$
$u = -1.50073 - 0.18378I$ $a = -1.184810 - 0.076406I$ $b = 0.662272 + 0.912764I$	$3.66769 + 6.66143I$	$4.22453 - 5.17747I$
$u = 0.395860 + 0.034188I$ $a = -2.66560 - 0.32394I$ $b = -0.183573 + 0.870910I$	$-3.35478 + 5.00709I$	$1.93752 - 5.36803I$
$u = 0.395860 - 0.034188I$ $a = -2.66560 + 0.32394I$ $b = -0.183573 - 0.870910I$	$-3.35478 - 5.00709I$	$1.93752 + 5.36803I$
$u = 1.65580$ $a = -1.61733$ $b = 0.760820$	9.97638	-80.3960

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17} - 2u^{16} + \dots - 4u - 1)(u^{88} + 9u^{87} + \dots - 24u - 1)$
c_2	$(u^{17} - 3u^{15} + \dots + 2u + 1)(u^{88} - u^{87} + \dots + 1530u - 73)$
c_3	$(u^{17} + 9u^{16} + \dots + 12u + 1)(u^{88} + 2u^{87} + \dots + 1392u + 133)$
c_4	$(u^{17} - 8u^{16} + \dots + 10u - 1)(u^{88} - 3u^{87} + \dots + 6998u + 2363)$
c_5	$(u^{17} - 2u^{16} + \dots + 2u - 1)(u^{88} - 3u^{87} + \dots - 12u - 1)$
c_6	$(u^{17} - 2u^{16} + \dots + 2u - 1)(u^{88} - u^{87} + \dots + 9888u - 1216)$
c_7	$(u^{17} - u^{16} + \dots + u - 1)(u^{88} + 26u^{86} + \dots + 35u - 19)$
c_8, c_9	$(u^{17} + 2u^{16} + \dots + 2u + 1)(u^{88} - 3u^{87} + \dots - 12u - 1)$
c_{10}	$(u^{17} + 4u^{16} + \dots + 2u - 1)(u^{88} + 5u^{87} + \dots + 32u - 1)$
c_{11}	$(u^{17} + u^{16} + \dots + u + 1)(u^{88} + 26u^{86} + \dots + 35u - 19)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 14y^{16} + \dots + 12y - 1)(y^{88} - 15y^{87} + \dots + 48y + 1)$
c_2	$(y^{17} - 6y^{16} + \dots - 8y^2 - 1)(y^{88} + 17y^{87} + \dots + 439816y + 5329)$
c_3	$(y^{17} + y^{16} + \dots + 18y - 1)(y^{88} - 16y^{87} + \dots - 1724598y + 17689)$
c_4	$(y^{17} + 2y^{16} + \dots + 4y - 1)$ $\cdot (y^{88} - 23y^{87} + \dots - 69312708y + 5583769)$
c_5, c_8, c_9	$(y^{17} - 18y^{16} + \dots + 18y - 1)(y^{88} - 87y^{87} + \dots + 6y + 1)$
c_6	$(y^{17} + 6y^{16} + \dots + 12y - 1)$ $\cdot (y^{88} - 7y^{87} + \dots - 41894912y + 1478656)$
c_7, c_{11}	$(y^{17} + 9y^{16} + \dots - 13y - 1)(y^{88} + 52y^{87} + \dots + 8009y + 361)$
c_{10}	$(y^{17} - 12y^{16} + \dots + 14y - 1)(y^{88} - 9y^{87} + \dots - 42y + 1)$