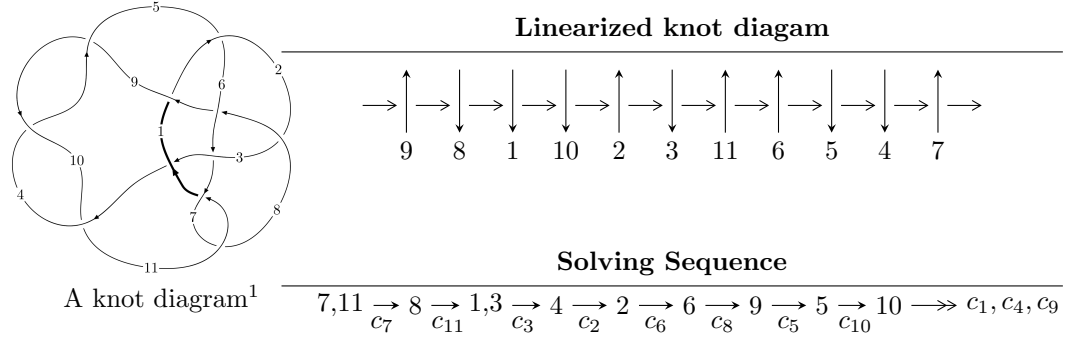


11a₂₇₀ (K11a₂₇₀)



Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 6.22010 \times 10^{178} u^{84} - 1.04877 \times 10^{178} u^{83} + \dots + 1.33787 \times 10^{178} b - 2.94730 \times 10^{180}, \\ 7.81629 \times 10^{180} u^{84} - 4.66338 \times 10^{179} u^{83} + \dots + 1.19071 \times 10^{180} a - 4.40124 \times 10^{182}, \\ u^{85} + 22u^{83} + \dots + 295u - 89 \rangle$$

$$I_2^u = \langle -u^{16} + u^{15} + \dots + b - 2u, 37u^{16} - 30u^{15} + \dots + 3a + 35, \\ u^{17} - u^{16} + 4u^{15} - 4u^{14} + 6u^{13} - 7u^{12} - u^{11} - 16u^9 + 19u^8 - 27u^7 + 33u^6 - 22u^5 + 24u^4 - 8u^3 + 8u^2 - u - \dots \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 102 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.

$$\mathbf{I. } I_1^u = \langle 6.22 \times 10^{178} u^{84} - 1.05 \times 10^{178} u^{83} + \dots + 1.34 \times 10^{178} b - 2.95 \times 10^{180}, 7.82 \times 10^{180} u^{84} - 4.66 \times 10^{179} u^{83} + \dots + 1.19 \times 10^{180} a - 4.40 \times 10^{182}, u^{85} + 22u^{83} + \dots + 295u - 89 \rangle$$

(i) Arc colorings

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

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

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

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

$$a_3 = \begin{pmatrix} -6.56441u^{84} + 0.391648u^{83} + \dots - 695.862u + 369.633 \\ -4.64925u^{84} + 0.783909u^{83} + \dots - 336.319u + 220.298 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -4.93046u^{84} - 0.281089u^{83} + \dots - 750.595u + 334.722 \\ -3.01529u^{84} + 0.111172u^{83} + \dots - 391.051u + 185.387 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -6.44414u^{84} - 1.95066u^{83} + \dots - 1731.95u + 624.788 \\ -5.82573u^{84} - 0.575017u^{83} + \dots - 1038.01u + 428.764 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 18.3104u^{84} - 3.35235u^{83} + \dots + 987.156u - 751.241 \\ 14.6628u^{84} - 4.03186u^{83} + \dots + 189.488u - 456.528 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 14.7840u^{84} + 23.8120u^{83} + \dots + 11886.5u - 3407.30 \\ 13.1209u^{84} + 19.3511u^{83} + \dots + 9780.17u - 2819.79 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 26.1341u^{84} - 10.8653u^{83} + \dots - 1474.91u - 346.013 \\ 17.7162u^{84} - 10.4087u^{83} + \dots - 2202.90u + 77.1428 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.61190u^{84} + 12.6221u^{83} + \dots + 5431.09u - 1319.21 \\ 0.891403u^{84} + 6.87910u^{83} + \dots + 3129.32u - 802.311 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.61190u^{84} + 12.6221u^{83} + \dots + 5431.09u - 1319.21 \\ 0.891403u^{84} + 6.87910u^{83} + \dots + 3129.32u - 802.311 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $10.9888u^{84} - 31.5549u^{83} + \dots - 12310.5u + 2763.36$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{85} - 22y^{84} + \dots + 57951y - 6889$
c_2	$y^{85} + 5y^{84} + \dots - 428219y - 7921$
c_3	$y^{85} - y^{84} + \dots + 36528y - 784$
c_4, c_9, c_{10}	$y^{85} + 91y^{84} + \dots + 108y - 1$
c_5	$y^{85} - 26y^{84} + \dots + 15305105y - 491401$
c_6	$y^{85} - 27y^{84} + \dots - 226978y - 2209$
c_7, c_{11}	$y^{85} + 44y^{84} + \dots - 152029y - 7921$
c_8	$y^{85} + 14y^{84} + \dots - 46y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.990583 + 0.156780I$ $a = -0.010000 - 0.290185I$ $b = 0.910228 - 0.729936I$	$0.50703 + 7.20249I$	0
$u = -0.990583 - 0.156780I$ $a = -0.010000 + 0.290185I$ $b = 0.910228 + 0.729936I$	$0.50703 - 7.20249I$	0
$u = 0.348189 + 0.949764I$ $a = -0.299627 - 0.451517I$ $b = 0.343573 + 1.260330I$	$5.97217 - 3.17989I$	0
$u = 0.348189 - 0.949764I$ $a = -0.299627 + 0.451517I$ $b = 0.343573 - 1.260330I$	$5.97217 + 3.17989I$	0
$u = -0.826847 + 0.527088I$ $a = -1.26230 + 0.66261I$ $b = -0.805769 - 0.073598I$	$7.26328 - 2.81966I$	0
$u = -0.826847 - 0.527088I$ $a = -1.26230 - 0.66261I$ $b = -0.805769 + 0.073598I$	$7.26328 + 2.81966I$	0
$u = -0.504249 + 0.900938I$ $a = -0.495942 - 0.147918I$ $b = -0.175068 + 0.862462I$	$6.60839 - 2.04669I$	0
$u = -0.504249 - 0.900938I$ $a = -0.495942 + 0.147918I$ $b = -0.175068 - 0.862462I$	$6.60839 + 2.04669I$	0
$u = 0.370751 + 0.964511I$ $a = 2.09678 + 0.74849I$ $b = 1.78001 - 0.38010I$	$-1.29284 + 1.77043I$	0
$u = 0.370751 - 0.964511I$ $a = 2.09678 - 0.74849I$ $b = 1.78001 + 0.38010I$	$-1.29284 - 1.77043I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.121508 + 1.029770I$ $a = -1.44704 + 0.90742I$ $b = -1.006470 - 0.378372I$	$-3.93614 - 0.79985I$	0
$u = -0.121508 - 1.029770I$ $a = -1.44704 - 0.90742I$ $b = -1.006470 + 0.378372I$	$-3.93614 + 0.79985I$	0
$u = -0.532279 + 0.762499I$ $a = -1.46595 - 0.28104I$ $b = -0.0316121 + 0.1122330I$	$7.05028 - 2.25316I$	0
$u = -0.532279 - 0.762499I$ $a = -1.46595 + 0.28104I$ $b = -0.0316121 - 0.1122330I$	$7.05028 + 2.25316I$	0
$u = -0.251015 + 1.055200I$ $a = -2.11732 - 0.34070I$ $b = -0.701200 - 0.509768I$	$-0.68905 - 4.95944I$	0
$u = -0.251015 - 1.055200I$ $a = -2.11732 + 0.34070I$ $b = -0.701200 + 0.509768I$	$-0.68905 + 4.95944I$	0
$u = -0.290713 + 0.867463I$ $a = 1.38286 - 0.59197I$ $b = 1.28028 - 1.10864I$	$5.29095 - 1.80419I$	0
$u = -0.290713 - 0.867463I$ $a = 1.38286 + 0.59197I$ $b = 1.28028 + 1.10864I$	$5.29095 + 1.80419I$	0
$u = -0.270696 + 0.871703I$ $a = 2.72325 + 0.14432I$ $b = 1.54169 + 0.09691I$	$5.31835 - 0.73098I$	0
$u = -0.270696 - 0.871703I$ $a = 2.72325 - 0.14432I$ $b = 1.54169 - 0.09691I$	$5.31835 + 0.73098I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.476405 + 0.979571I$ $a = 0.020053 - 0.849554I$ $b = -0.55978 - 1.60625I$	$6.89508 + 8.42993I$	0
$u = 0.476405 - 0.979571I$ $a = 0.020053 + 0.849554I$ $b = -0.55978 + 1.60625I$	$6.89508 - 8.42993I$	0
$u = -0.251627 + 0.867975I$ $a = 1.72706 + 0.60350I$ $b = 0.898499 + 0.920377I$	$0.47607 + 1.35841I$	0
$u = -0.251627 - 0.867975I$ $a = 1.72706 - 0.60350I$ $b = 0.898499 - 0.920377I$	$0.47607 - 1.35841I$	0
$u = 0.867924 + 0.117197I$ $a = 0.401814 - 0.078087I$ $b = 0.073704 - 0.631355I$	$2.45654 + 0.38545I$	0
$u = 0.867924 - 0.117197I$ $a = 0.401814 + 0.078087I$ $b = 0.073704 + 0.631355I$	$2.45654 - 0.38545I$	0
$u = -0.511179 + 1.033880I$ $a = -0.860377 + 0.932551I$ $b = -1.197380 - 0.080280I$	$-3.67030 - 1.93800I$	0
$u = -0.511179 - 1.033880I$ $a = -0.860377 - 0.932551I$ $b = -1.197380 + 0.080280I$	$-3.67030 + 1.93800I$	0
$u = 0.804514 + 0.199840I$ $a = -0.254918 - 0.463753I$ $b = 0.861149 + 0.863904I$	$4.16809 - 3.00834I$	0
$u = 0.804514 - 0.199840I$ $a = -0.254918 + 0.463753I$ $b = 0.861149 - 0.863904I$	$4.16809 + 3.00834I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.224344 + 0.788625I$ $a = 3.65794 - 0.56435I$ $b = 0.411602 - 0.536484I$	$6.72774 + 5.81245I$	$0. - 10.65615I$
$u = 0.224344 - 0.788625I$ $a = 3.65794 + 0.56435I$ $b = 0.411602 + 0.536484I$	$6.72774 - 5.81245I$	$0. + 10.65615I$
$u = 1.151880 + 0.340683I$ $a = -0.125453 - 0.215082I$ $b = -1.039420 - 0.763839I$	$7.27474 - 10.59070I$	0
$u = 1.151880 - 0.340683I$ $a = -0.125453 + 0.215082I$ $b = -1.039420 + 0.763839I$	$7.27474 + 10.59070I$	0
$u = -0.451547 + 1.119340I$ $a = -1.83462 + 0.36797I$ $b = -1.37742 - 0.92532I$	$-3.81248 - 5.22210I$	0
$u = -0.451547 - 1.119340I$ $a = -1.83462 - 0.36797I$ $b = -1.37742 + 0.92532I$	$-3.81248 + 5.22210I$	0
$u = -0.261477 + 0.747690I$ $a = -0.432549 - 1.141910I$ $b = 0.03198 - 1.67566I$	$0.88272 - 4.07370I$	$0. + 10.38748I$
$u = -0.261477 - 0.747690I$ $a = -0.432549 + 1.141910I$ $b = 0.03198 + 1.67566I$	$0.88272 + 4.07370I$	$0. - 10.38748I$
$u = 0.282937 + 1.182750I$ $a = 1.022110 + 0.688758I$ $b = 1.125510 + 0.384277I$	$-0.241277 + 0.561006I$	0
$u = 0.282937 - 1.182750I$ $a = 1.022110 - 0.688758I$ $b = 1.125510 - 0.384277I$	$-0.241277 - 0.561006I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.289715 + 0.708348I$ $a = 0.642373 + 0.547818I$ $b = 0.358840 + 0.533193I$	$-0.10663 + 1.41201I$	$0. - 4.19142I$
$u = 0.289715 - 0.708348I$ $a = 0.642373 - 0.547818I$ $b = 0.358840 - 0.533193I$	$-0.10663 - 1.41201I$	$0. + 4.19142I$
$u = 0.772781 + 0.972939I$ $a = 0.563431 + 0.899223I$ $b = 1.392510 - 0.236188I$	$1.25410 + 3.01463I$	0
$u = 0.772781 - 0.972939I$ $a = 0.563431 - 0.899223I$ $b = 1.392510 + 0.236188I$	$1.25410 - 3.01463I$	0
$u = 0.405461 + 1.174790I$ $a = -1.92488 + 0.10074I$ $b = -1.51977 + 0.86693I$	$-3.19196 + 6.54059I$	0
$u = 0.405461 - 1.174790I$ $a = -1.92488 - 0.10074I$ $b = -1.51977 - 0.86693I$	$-3.19196 - 6.54059I$	0
$u = 0.283503 + 1.211850I$ $a = 1.23366 + 0.88279I$ $b = 0.781274 - 0.343663I$	$-4.50297 + 4.26915I$	0
$u = 0.283503 - 1.211850I$ $a = 1.23366 - 0.88279I$ $b = 0.781274 + 0.343663I$	$-4.50297 - 4.26915I$	0
$u = 1.24666$ $a = 0.301059$ $b = 0.416139$	2.46366	0
$u = 0.483671 + 0.546181I$ $a = -2.58654 - 0.36620I$ $b = -0.779143 + 0.909707I$	$8.18862 - 4.43585I$	$5.12877 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.483671 - 0.546181I$ $a = -2.58654 + 0.36620I$ $b = -0.779143 - 0.909707I$	$8.18862 + 4.43585I$	$5.12877 + 0.I$
$u = 0.531255 + 1.172220I$ $a = 1.68589 + 0.40460I$ $b = 1.08577 - 1.17737I$	$1.30376 + 7.93201I$	0
$u = 0.531255 - 1.172220I$ $a = 1.68589 - 0.40460I$ $b = 1.08577 + 1.17737I$	$1.30376 - 7.93201I$	0
$u = 0.470292 + 1.198160I$ $a = -1.090840 + 0.207986I$ $b = -0.837680 + 0.961854I$	$-0.82206 + 4.30776I$	0
$u = 0.470292 - 1.198160I$ $a = -1.090840 - 0.207986I$ $b = -0.837680 - 0.961854I$	$-0.82206 - 4.30776I$	0
$u = -1.184660 + 0.505149I$ $a = -0.169952 - 0.204856I$ $b = 0.530026 - 0.504262I$	$8.34857 + 2.37496I$	0
$u = -1.184660 - 0.505149I$ $a = -0.169952 + 0.204856I$ $b = 0.530026 + 0.504262I$	$8.34857 - 2.37496I$	0
$u = 0.573453 + 1.187210I$ $a = -0.255978 - 0.616026I$ $b = -0.567825 + 0.210292I$	$-2.13717 + 1.86843I$	0
$u = 0.573453 - 1.187210I$ $a = -0.255978 + 0.616026I$ $b = -0.567825 - 0.210292I$	$-2.13717 - 1.86843I$	0
$u = -0.281772 + 1.330610I$ $a = 0.791575 - 0.657737I$ $b = 0.774412 + 0.043237I$	$-4.64818 + 2.67744I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.281772 - 1.330610I$ $a = 0.791575 + 0.657737I$ $b = 0.774412 - 0.043237I$	$-4.64818 - 2.67744I$	0
$u = -0.553567 + 1.250070I$ $a = 1.70321 - 0.18110I$ $b = 1.41016 + 0.89938I$	$-2.87315 - 12.69490I$	0
$u = -0.553567 - 1.250070I$ $a = 1.70321 + 0.18110I$ $b = 1.41016 - 0.89938I$	$-2.87315 + 12.69490I$	0
$u = -0.399494 + 1.309870I$ $a = -1.22949 + 0.92957I$ $b = -0.642917 - 0.341349I$	$1.87995 - 6.80929I$	0
$u = -0.399494 - 1.309870I$ $a = -1.22949 - 0.92957I$ $b = -0.642917 + 0.341349I$	$1.87995 + 6.80929I$	0
$u = 0.595445 + 0.174267I$ $a = 0.575031 + 0.318263I$ $b = -0.597052 + 0.752886I$	$0.34617 + 2.88115I$	$1.43324 - 4.17633I$
$u = 0.595445 - 0.174267I$ $a = 0.575031 - 0.318263I$ $b = -0.597052 - 0.752886I$	$0.34617 - 2.88115I$	$1.43324 + 4.17633I$
$u = -0.154501 + 0.596781I$ $a = 0.438606 - 0.655981I$ $b = -0.352733 + 1.047410I$	$0.84143 + 2.66817I$	$5.48084 + 2.01191I$
$u = -0.154501 - 0.596781I$ $a = 0.438606 + 0.655981I$ $b = -0.352733 - 1.047410I$	$0.84143 - 2.66817I$	$5.48084 - 2.01191I$
$u = 0.461171 + 0.387458I$ $a = 0.585527 + 1.214750I$ $b = 0.869382 + 0.309042I$	$-0.10975 + 1.69726I$	$1.00781 - 4.89719I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.461171 - 0.387458I$ $a = 0.585527 - 1.214750I$ $b = 0.869382 - 0.309042I$	$-0.10975 - 1.69726I$	$1.00781 + 4.89719I$
$u = 0.537044 + 1.295450I$ $a = 1.46046 + 0.21109I$ $b = 1.054190 - 0.533366I$	$-1.81524 + 5.66138I$	0
$u = 0.537044 - 1.295450I$ $a = 1.46046 - 0.21109I$ $b = 1.054190 + 0.533366I$	$-1.81524 - 5.66138I$	0
$u = -0.694195 + 1.229040I$ $a = 1.023410 - 0.120682I$ $b = 0.911760 + 0.906877I$	$5.84291 - 9.00773I$	0
$u = -0.694195 - 1.229040I$ $a = 1.023410 + 0.120682I$ $b = 0.911760 - 0.906877I$	$5.84291 + 9.00773I$	0
$u = -0.546200 + 0.154942I$ $a = 0.615539 + 0.119715I$ $b = -0.786001 + 0.587111I$	$-1.15598 + 1.24391I$	$-4.65832 - 4.55750I$
$u = -0.546200 - 0.154942I$ $a = 0.615539 - 0.119715I$ $b = -0.786001 - 0.587111I$	$-1.15598 - 1.24391I$	$-4.65832 + 4.55750I$
$u = 0.67035 + 1.26586I$ $a = -1.60680 - 0.35437I$ $b = -1.35253 + 0.93606I$	$4.3164 + 17.0324I$	0
$u = 0.67035 - 1.26586I$ $a = -1.60680 + 0.35437I$ $b = -1.35253 - 0.93606I$	$4.3164 - 17.0324I$	0
$u = -1.40601 + 0.30370I$ $a = -0.302783 - 0.013160I$ $b = -0.716976 + 0.312930I$	$7.71128 - 0.46262I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.40601 - 0.30370I$ $a = -0.302783 + 0.013160I$ $b = -0.716976 - 0.312930I$	$7.71128 + 0.46262I$	0
$u = -0.00121 + 1.51049I$ $a = -1.084020 - 0.360717I$ $b = -0.997531 - 0.147584I$	$-0.00345 - 5.98667I$	0
$u = -0.00121 - 1.51049I$ $a = -1.084020 + 0.360717I$ $b = -0.997531 + 0.147584I$	$-0.00345 + 5.98667I$	0
$u = -0.73908 + 1.37329I$ $a = -1.272940 + 0.343655I$ $b = -1.090350 - 0.558936I$	$4.16408 - 6.92555I$	0
$u = -0.73908 - 1.37329I$ $a = -1.272940 - 0.343655I$ $b = -1.090350 + 0.558936I$	$4.16408 + 6.92555I$	0

$$\langle -u^{16} + u^{15} + \dots + b - 2u, 37u^{16} - 30u^{15} + \dots + 3a + 35, u^{17} - u^{16} + \dots - u + 1 \rangle$$

II. $I_2^u =$

(i) Arc colorings

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

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

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

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

$$a_3 = \begin{pmatrix} -\frac{37}{3}u^{16} + 10u^{15} + \dots - 27u - \frac{35}{3} \\ u^{16} - u^{15} + \dots - u^2 + 2u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -\frac{23}{3}u^{16} + 5u^{15} + \dots - 16u - \frac{28}{3} \\ \frac{17}{3}u^{16} - 6u^{15} + \dots + 13u + \frac{7}{3} \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -\frac{23}{3}u^{16} + 5u^{15} + \dots - 15u - \frac{28}{3} \\ \frac{10}{3}u^{16} - 4u^{15} + \dots + 7u - \frac{1}{3} \end{pmatrix}$$

$$a_6 = \begin{pmatrix} \frac{2}{3}u^{16} - 6u^{15} + \dots + 30u - \frac{50}{3} \\ -2u^{16} + 6u^{15} + \dots - 7u + 5 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} \frac{16}{3}u^{16} - 3u^{15} + \dots - u - \frac{10}{3} \\ \frac{26}{3}u^{16} - 10u^{15} + \dots + 24u - \frac{32}{3} \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 3u^{16} + 9u^{15} + \dots - 11u + 29 \\ -4u^{16} + 15u^{15} + \dots - 29u + 20 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} \frac{14}{3}u^{16} - 14u^{15} + \dots + 46u - \frac{56}{3} \\ -\frac{7}{3}u^{16} + 3u^{15} + \dots - 8u + \frac{31}{3} \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} \frac{14}{3}u^{16} - 14u^{15} + \dots + 46u - \frac{56}{3} \\ -\frac{7}{3}u^{16} + 3u^{15} + \dots - 8u + \frac{31}{3} \end{pmatrix}$$

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = 42u^{16} - 60u^{15} + 163u^{14} - 217u^{13} + 242u^{12} - 312u^{11} - 22u^{10} + 163u^9 - 619u^8 + 1042u^7 - 1162u^6 + 1414u^5 - 1028u^4 + 759u^3 - 380u^2 + 131u - 50$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} + u^{16} + \dots - 3u - 1$
c_2	$u^{17} - 2u^{15} + \dots - u - 1$
c_3	$u^{17} + 6u^{16} + \dots + 24u + 4$
c_4	$u^{17} + 11u^{15} + \dots + 2u + 1$
c_5	$u^{17} + u^{16} + \dots - 5u - 1$
c_6	$u^{17} - 4u^{16} + \dots - 2u + 1$
c_7	$u^{17} - u^{16} + \dots - u + 1$
c_8	$u^{17} - 3u^{16} + \dots - 2u^2 - 1$
c_9, c_{10}	$u^{17} + 11u^{15} + \dots + 2u - 1$
c_{11}	$u^{17} + u^{16} + \dots - u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 11y^{16} + \dots - 3y - 1$
c_2	$y^{17} - 4y^{16} + \dots + 23y - 1$
c_3	$y^{17} + 6y^{16} + \dots + 96y - 16$
c_4, c_9, c_{10}	$y^{17} + 22y^{16} + \dots + 14y - 1$
c_5	$y^{17} - 7y^{16} + \dots + 11y - 1$
c_6	$y^{17} - 8y^{16} + \dots + 12y - 1$
c_7, c_{11}	$y^{17} + 7y^{16} + \dots - 15y - 1$
c_8	$y^{17} + 5y^{16} + \dots - 4y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.296158 + 0.962340I$		
$a = 1.74880 + 1.17015I$	$-1.66547 + 1.22003I$	$-7.34562 + 1.66081I$
$b = 1.69902 - 0.03786I$		
$u = 0.296158 - 0.962340I$		
$a = 1.74880 - 1.17015I$	$-1.66547 - 1.22003I$	$-7.34562 - 1.66081I$
$b = 1.69902 + 0.03786I$		
$u = 0.266286 + 0.834120I$		
$a = 2.23710 + 0.20745I$	$5.58457 + 1.36975I$	$7.85861 - 1.02572I$
$b = 1.39150 + 0.57569I$		
$u = 0.266286 - 0.834120I$		
$a = 2.23710 - 0.20745I$	$5.58457 - 1.36975I$	$7.85861 + 1.02572I$
$b = 1.39150 - 0.57569I$		
$u = 1.197910 + 0.041998I$		
$a = 0.213861 - 0.495187I$	$7.65655 - 1.53651I$	$3.05438 + 1.89060I$
$b = 0.492186 - 0.003093I$		
$u = 1.197910 - 0.041998I$		
$a = 0.213861 + 0.495187I$	$7.65655 + 1.53651I$	$3.05438 - 1.89060I$
$b = 0.492186 + 0.003093I$		
$u = -0.632711 + 1.066170I$		
$a = -0.491801 + 0.633446I$	$-2.32528 - 2.66972I$	$-3.07111 + 6.02917I$
$b = -0.849453 - 0.302995I$		
$u = -0.632711 - 1.066170I$		
$a = -0.491801 - 0.633446I$	$-2.32528 + 2.66972I$	$-3.07111 - 6.02917I$
$b = -0.849453 + 0.302995I$		
$u = -0.399374 + 1.204610I$		
$a = -1.59525 + 0.01774I$	$-2.43226 - 4.98909I$	$-3.85930 + 5.31412I$
$b = -1.031450 - 0.727650I$		
$u = -0.399374 - 1.204610I$		
$a = -1.59525 - 0.01774I$	$-2.43226 + 4.98909I$	$-3.85930 - 5.31412I$
$b = -1.031450 + 0.727650I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.29892$ $a = -0.218895$ $b = -0.483375$	2.34345	-34.4900
$u = -0.024098 + 0.674226I$ $a = 0.994603 + 0.408289I$ $b = -0.117213 + 1.227870I$	$0.44571 + 3.07804I$	$-4.36238 - 7.29027I$
$u = -0.024098 - 0.674226I$ $a = 0.994603 - 0.408289I$ $b = -0.117213 - 1.227870I$	$0.44571 - 3.07804I$	$-4.36238 + 7.29027I$
$u = 0.481433 + 1.326120I$ $a = 1.38140 + 0.37383I$ $b = 0.754556 - 0.688360I$	$2.71154 + 7.20938I$	$2.03223 - 7.85052I$
$u = 0.481433 - 1.326120I$ $a = 1.38140 - 0.37383I$ $b = 0.754556 + 0.688360I$	$2.71154 - 7.20938I$	$2.03223 + 7.85052I$
$u = -0.036151 + 0.553257I$ $a = -3.87927 - 0.00814I$ $b = -0.097466 + 0.790200I$	$6.94718 - 5.08907I$	$1.93807 + 2.07497I$
$u = -0.036151 - 0.553257I$ $a = -3.87927 + 0.00814I$ $b = -0.097466 - 0.790200I$	$6.94718 + 5.08907I$	$1.93807 - 2.07497I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
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 crossing
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	$(y^{17} - 7y^{16} + \dots + 11y - 1)$ $\cdot (y^{85} - 26y^{84} + \dots + 15305105y - 491401)$
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	$(y^{17} + 5y^{16} + \dots - 4y - 1)(y^{85} + 14y^{84} + \dots - 46y - 1)$