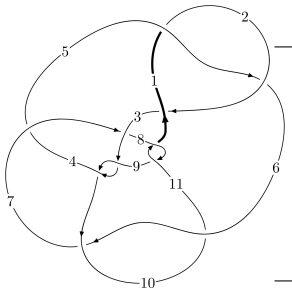
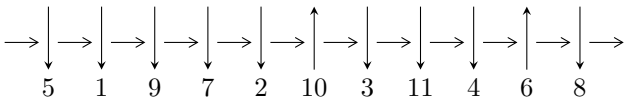
$11a_{116}$ ($K11a_{116}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

Ideals for irreducible components[2]of $X_{\mathbf{par}}$

$$\begin{aligned} I_1^u = \langle & 3.00006 \times 10^{116} u^{83} - 6.80069 \times 10^{116} u^{82} + \cdots + 1.41969 \times 10^{116} b - 5.82904 \times 10^{117}, \\ & - 2.28133 \times 10^{118} u^{83} + 8.84656 \times 10^{118} u^{82} + \cdots + 2.41347 \times 10^{117} a - 2.50578 \times 10^{119}, \\ & u^{84} - 5u^{83} + \cdots + 84u - 17 \rangle \\ I_2^u = \langle & -u^{15} + 4u^{13} - u^{12} - 10u^{11} + 4u^{10} + 15u^9 - 10u^8 - 18u^7 + 12u^6 + 13u^5 - 11u^4 - 6u^3 + 7u^2 + b + 2u - 2, \\ & - 4u^{15} + 2u^{14} + \cdots + a - 3,\ u^{16} - 4u^{14} + 10u^{12} - 16u^{10} + u^9 + 21u^8 - 19u^6 - 2u^5 + 11u^4 + u^3 - 4u^2 + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 100 representations.

[1]The 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`).

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

I. $\boldsymbol{I_1^u = \langle 3.00 \times 10^{116} u^{83} - 6.80 \times 10^{116} u^{82} + \cdots + 1.42 \times 10^{116} b - 5.83 \times 10^{117},\ -2.28 \times 10^{118} u^{83} + 8.85 \times 10^{118} u^{82} + \cdots + 2.41 \times 10^{117} a - 2.51 \times 10^{119},\ u^{84} - 5u^{83} + \cdots + 84u - 17 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 9.45248u^{83} - 36.6550u^{82} + \cdots - 485.532u + 103.825 \\ -2.11318u^{83} + 4.79027u^{82} + \cdots - 94.7799u + 41.0586 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 7.48664u^{83} - 30.4435u^{82} + \cdots - 470.700u + 107.907 \\ -3.18690u^{83} + 11.1199u^{82} + \cdots + 76.7100u - 4.10517 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 2.35529u^{83} - 10.5702u^{82} + \cdots - 179.463u + 31.5654 \\ -6.32184u^{83} + 25.6009u^{82} + \cdots + 384.645u - 88.1719 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -2.19228u^{83} + 8.56750u^{82} + \cdots + 103.363u - 13.1483 \\ 2.18637u^{83} - 10.0740u^{82} + \cdots - 193.104u + 50.8633 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -5.09729u^{83} + 19.6966u^{82} + \cdots + 234.342u - 37.5811 \\ 1.58854u^{83} - 2.48611u^{82} + \cdots + 94.3251u - 33.4791 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.48871u^{83} - 5.29073u^{82} + \cdots - 48.2350u + 12.4535 \\ 2.48559u^{83} - 14.1259u^{82} + \cdots - 360.853u + 102.556 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.48871u^{83} - 5.29073u^{82} + \cdots - 48.2350u + 12.4535 \\ 2.48559u^{83} - 14.1259u^{82} + \cdots - 360.853u + 102.556 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -8.42434u^{83} + 26.3174u^{82} + \cdots + 49.5896u - 2.87092$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{84} + 5u^{83} + \cdots - 84u - 17$
c_2	$u^{84} + 35u^{83} + \cdots + 4574u + 289$
c_3, c_9	$u^{84} - u^{83} + \cdots - 344u - 313$
c_4	$u^{84} - 3u^{83} + \cdots - 36000u + 7373$
c_6, c_{10}	$u^{84} - 2u^{83} + \cdots + 2657u + 1007$
c_7	$u^{84} + u^{83} + \cdots + 1236u - 149$
c_8, c_{11}	$u^{84} - 4u^{83} + \cdots + 943u + 169$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{84} - 35y^{83} + \cdots - 4574y + 289$
c_2	$y^{84} + 37y^{83} + \cdots + 1003798y + 83521$
c_3, c_9	$y^{84} - 63y^{83} + \cdots - 575316y + 97969$
c_4	$y^{84} - 23y^{83} + \cdots - 1969346598y + 54361129$
c_6, c_{10}	$y^{84} + 58y^{83} + \cdots - 14592009y + 1014049$
c_7	$y^{84} + 9y^{83} + \cdots - 735016y + 22201$
c_8, c_{11}	$y^{84} + 54y^{83} + \cdots - 133481y + 28561$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.924233 + 0.381001I$ $a = -1.189090 - 0.186102I$ $b = -0.584907 + 0.883967I$	$-5.50829 + 1.23925I$	0
$u = 0.924233 - 0.381001I$ $a = -1.189090 + 0.186102I$ $b = -0.584907 - 0.883967I$	$-5.50829 - 1.23925I$	0
$u = 0.848735 + 0.552750I$ $a = 0.80963 - 1.88902I$ $b = 0.03682 + 1.54888I$	$1.67908 - 4.25752I$	0
$u = 0.848735 - 0.552750I$ $a = 0.80963 + 1.88902I$ $b = 0.03682 - 1.54888I$	$1.67908 + 4.25752I$	0
$u = 0.845759 + 0.569884I$ $a = -1.65496 + 1.53990I$ $b = -0.147553 - 1.309790I$	$1.66836 - 0.23942I$	0
$u = 0.845759 - 0.569884I$ $a = -1.65496 - 1.53990I$ $b = -0.147553 + 1.309790I$	$1.66836 + 0.23942I$	0
$u = 0.968420 + 0.136764I$ $a = -0.704553 - 0.369797I$ $b = 0.165468 - 0.727616I$	$-0.639069 - 0.016973I$	0
$u = 0.968420 - 0.136764I$ $a = -0.704553 + 0.369797I$ $b = 0.165468 + 0.727616I$	$-0.639069 + 0.016973I$	0
$u = -0.838743 + 0.586229I$ $a = -0.283784 - 0.310721I$ $b = -0.589308 - 0.180708I$	$1.63611 + 2.33220I$	0
$u = -0.838743 - 0.586229I$ $a = -0.283784 + 0.310721I$ $b = -0.589308 + 0.180708I$	$1.63611 - 2.33220I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.971423$ $a=\ \ 1.33586$ $b=\ \ 0.757439$	-5.46066	0
$u=-0.813349+0.501390I$ $a=-0.766920-1.077030I$ $b=\ \ 0.55474+1.54764I$	$1.29451-0.79166I$	0
$u=-0.813349-0.501390I$ $a=-0.766920+1.077030I$ $b=\ \ 0.55474-1.54764I$	$1.29451+0.79166I$	0
$u=-0.614279+0.844816I$ $a=\ \ 0.06379+1.49673I$ $b=-0.219292-1.201960I$	$5.79981-0.28419I$	0
$u=-0.614279-0.844816I$ $a=\ \ 0.06379-1.49673I$ $b=-0.219292+1.201960I$	$5.79981+0.28419I$	0
$u=\ \ 0.798838+0.677298I$ $a=-1.19317+1.38455I$ $b=\ \ 0.34954-1.41280I$	$2.12448+0.03164I$	0
$u=\ \ 0.798838-0.677298I$ $a=-1.19317-1.38455I$ $b=\ \ 0.34954+1.41280I$	$2.12448-0.03164I$	0
$u=-1.046440+0.103775I$ $a=\ \ 0.681099+0.610527I$ $b=\ \ 0.332202+1.081850I$	$-2.03076-3.48760I$	0
$u=-1.046440-0.103775I$ $a=\ \ 0.681099-0.610527I$ $b=\ \ 0.332202-1.081850I$	$-2.03076+3.48760I$	0
$u=-0.914999+0.533114I$ $a=\ \ 1.51015+1.36327I$ $b=\ \ 0.73110-1.33781I$	$0.92165+4.97911I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.914999-0.533114I$ $a=\ \ 1.51015-1.36327I$ $b=\ \ 0.73110+1.33781I$	$0.92165-4.97911I$	0
$u=-0.935408+0.527321I$ $a=-0.86462-2.90843I$ $b=-0.207875+1.010240I$	$-4.63959+6.23446I$	0
$u=-0.935408-0.527321I$ $a=-0.86462+2.90843I$ $b=-0.207875-1.010240I$	$-4.63959-6.23446I$	0
$u=-0.763420+0.761760I$ $a=\ \ 0.973936+0.865621I$ $b=-0.85674-1.29167I$	$1.14157-1.26918I$	0
$u=-0.763420-0.761760I$ $a=\ \ 0.973936-0.865621I$ $b=-0.85674+1.29167I$	$1.14157+1.26918I$	0
$u=\ \ 0.521170+0.758710I$ $a=\ \ 0.03417+1.68577I$ $b=\ \ 0.424961-1.276360I$	$3.02744+4.89516I$	0
$u=\ \ 0.521170-0.758710I$ $a=\ \ 0.03417-1.68577I$ $b=\ \ 0.424961+1.276360I$	$3.02744-4.89516I$	0
$u=-0.768826+0.492020I$ $a=\ \ 2.46598+2.55062I$ $b=-0.012025-0.813250I$	$-4.06248-2.06222I$	0
$u=-0.768826-0.492020I$ $a=\ \ 2.46598-2.55062I$ $b=-0.012025+0.813250I$	$-4.06248+2.06222I$	0
$u=\ \ 0.516212+0.960636I$ $a=\ \ 0.42670-1.54053I$ $b=-0.57898+1.31209I$	$-0.87258+11.01470I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.516212 - 0.960636I$ $a = 0.42670 + 1.54053I$ $b = -0.57898 - 1.31209I$	$-0.87258 - 11.01470I$	0
$u = 0.909276 + 0.647697I$ $a = 0.98702 - 1.94972I$ $b = 0.58065 + 1.37768I$	$1.77553 - 5.16233I$	0
$u = 0.909276 - 0.647697I$ $a = 0.98702 + 1.94972I$ $b = 0.58065 - 1.37768I$	$1.77553 + 5.16233I$	0
$u = -0.481764 + 1.013270I$ $a = -0.35439 - 1.57120I$ $b = 0.323971 + 1.259510I$	$3.90791 - 4.63787I$	0
$u = -0.481764 - 1.013270I$ $a = -0.35439 + 1.57120I$ $b = 0.323971 - 1.259510I$	$3.90791 + 4.63787I$	0
$u = 0.961253 + 0.594515I$ $a = 0.251395 - 0.984707I$ $b = 0.850842 - 0.051552I$	$-2.09802 - 5.16082I$	0
$u = 0.961253 - 0.594515I$ $a = 0.251395 + 0.984707I$ $b = 0.850842 + 0.051552I$	$-2.09802 + 5.16082I$	0
$u = -1.131210 + 0.112806I$ $a = -0.733591 - 0.853437I$ $b = -0.905943 + 0.572167I$	$-9.57353 - 3.10518I$	0
$u = -1.131210 - 0.112806I$ $a = -0.733591 + 0.853437I$ $b = -0.905943 - 0.572167I$	$-9.57353 + 3.10518I$	0
$u = 0.471917 + 0.702478I$ $a = 0.572616 + 1.060120I$ $b = -1.144530 - 0.094381I$	$-4.65745 + 5.03247I$	$-9.49279 - 3.83658I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.471917 - 0.702478I$ $a = 0.572616 - 1.060120I$ $b = -1.144530 + 0.094381I$	$-4.65745 - 5.03247I$	$-9.49279 + 3.83658I$
$u = 1.096910 + 0.382434I$ $a = -1.061400 - 0.276192I$ $b = -0.531659 - 0.788541I$	$-5.82688 - 3.28009I$	0
$u = 1.096910 - 0.382434I$ $a = -1.061400 + 0.276192I$ $b = -0.531659 + 0.788541I$	$-5.82688 + 3.28009I$	0
$u = -0.942860 + 0.714978I$ $a = -0.78435 - 1.79433I$ $b = -1.03147 + 1.21286I$	$0.59518 + 6.86334I$	0
$u = -0.942860 - 0.714978I$ $a = -0.78435 + 1.79433I$ $b = -1.03147 - 1.21286I$	$0.59518 - 6.86334I$	0
$u = 0.596089 + 0.557713I$ $a = -0.347197 - 0.090408I$ $b = 0.773058 - 0.097107I$	$-1.089040 + 0.486692I$	$-7.73280 - 0.29333I$
$u = 0.596089 - 0.557713I$ $a = -0.347197 + 0.090408I$ $b = 0.773058 + 0.097107I$	$-1.089040 - 0.486692I$	$-7.73280 + 0.29333I$
$u = -1.056950 + 0.545848I$ $a = 0.208689 + 0.551098I$ $b = 1.020060 - 0.148712I$	$-2.67134 + 5.68638I$	0
$u = -1.056950 - 0.545848I$ $a = 0.208689 - 0.551098I$ $b = 1.020060 + 0.148712I$	$-2.67134 - 5.68638I$	0
$u = -1.140200 + 0.448126I$ $a = 0.650913 - 0.755668I$ $b = -0.174963 - 0.798938I$	$-5.41622 + 4.47785I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.140200-0.448126I$ $a=\ \ 0.650913+0.755668I$ $b=-0.174963+0.798938I$	$-5.41622-4.47785I$	0
$u=\ \ 1.061020+0.614747I$ $a=\ \ 0.288056+0.710613I$ $b=-1.345650+0.262453I$	$-6.34457-10.11980I$	0
$u=\ \ 1.061020-0.614747I$ $a=\ \ 0.288056-0.710613I$ $b=-1.345650-0.262453I$	$-6.34457+10.11980I$	0
$u=\ \ 0.476265+1.137210I$ $a=\ \ 0.061878+1.260730I$ $b=-0.227503-0.997805I$	$-1.16692-5.02448I$	0
$u=\ \ 0.476265-1.137210I$ $a=\ \ 0.061878-1.260730I$ $b=-0.227503+0.997805I$	$-1.16692+5.02448I$	0
$u=\ \ 1.066260+0.631314I$ $a=\ \ 1.69408-1.38250I$ $b=\ \ 0.521263+1.244830I$	$1.40099-10.18500I$	0
$u=\ \ 1.066260-0.631314I$ $a=\ \ 1.69408+1.38250I$ $b=\ \ 0.521263-1.244830I$	$1.40099+10.18500I$	0
$u=-1.049430+0.693298I$ $a=-1.32203-1.27305I$ $b=-0.376111+1.147870I$	$4.46403+6.01634I$	0
$u=-1.049430-0.693298I$ $a=-1.32203+1.27305I$ $b=-0.376111-1.147870I$	$4.46403-6.01634I$	0
$u=\ \ 0.886751+0.914091I$ $a=\ \ 0.71937-1.38169I$ $b=-0.068110+0.784716I$	$-2.24639-3.36926I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.886751 - 0.914091I$ $a = 0.71937 + 1.38169I$ $b = -0.068110 - 0.784716I$	$-2.24639 + 3.36926I$	0
$u = 1.239180 + 0.296514I$ $a = 0.196626 - 0.608379I$ $b = 0.407542 + 0.459768I$	$-4.43546 - 1.79841I$	0
$u = 1.239180 - 0.296514I$ $a = 0.196626 + 0.608379I$ $b = 0.407542 - 0.459768I$	$-4.43546 + 1.79841I$	0
$u = -0.089516 + 0.711684I$ $a = 0.174468 - 0.352691I$ $b = -0.325409 + 0.982794I$	$-2.36639 - 0.26933I$	$-7.90830 - 0.43010I$
$u = -0.089516 - 0.711684I$ $a = 0.174468 + 0.352691I$ $b = -0.325409 - 0.982794I$	$-2.36639 + 0.26933I$	$-7.90830 + 0.43010I$
$u = -0.664677 + 0.252947I$ $a = 0.205579 + 0.749494I$ $b = 0.732836 + 0.736371I$	$-0.78313 - 1.64097I$	$-1.66824 + 0.93836I$
$u = -0.664677 - 0.252947I$ $a = 0.205579 - 0.749494I$ $b = 0.732836 - 0.736371I$	$-0.78313 + 1.64097I$	$-1.66824 - 0.93836I$
$u = 0.701904$ $a = -0.582122$ $b = 0.199043$	-0.948107	-10.6510
$u = -1.315360 + 0.063866I$ $a = -0.374103 - 0.149155I$ $b = -0.583906 + 1.040760I$	$-8.01674 + 8.52986I$	0
$u = -1.315360 - 0.063866I$ $a = -0.374103 + 0.149155I$ $b = -0.583906 - 1.040760I$	$-8.01674 - 8.52986I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.134840 + 0.703653I$ $a = -1.17173 + 1.58065I$ $b = -0.67909 - 1.35235I$	$-2.7877 - 17.0880I$	0
$u = 1.134840 - 0.703653I$ $a = -1.17173 - 1.58065I$ $b = -0.67909 + 1.35235I$	$-2.7877 + 17.0880I$	0
$u = -1.151250 + 0.708883I$ $a = 1.04101 + 1.44139I$ $b = 0.472819 - 1.330060I$	$1.84085 + 10.83500I$	0
$u = -1.151250 - 0.708883I$ $a = 1.04101 - 1.44139I$ $b = 0.472819 + 1.330060I$	$1.84085 - 10.83500I$	0
$u = 0.228391 + 0.589108I$ $a = -0.05996 - 1.99843I$ $b = 0.234801 + 1.210160I$	$2.17927 - 2.72756I$	$-0.28263 + 2.49984I$
$u = 0.228391 - 0.589108I$ $a = -0.05996 + 1.99843I$ $b = 0.234801 - 1.210160I$	$2.17927 + 2.72756I$	$-0.28263 - 2.49984I$
$u = 1.14069 + 0.84432I$ $a = -0.51171 + 1.44701I$ $b = -0.239373 - 1.032900I$	$-2.98338 - 3.56955I$	0
$u = 1.14069 - 0.84432I$ $a = -0.51171 - 1.44701I$ $b = -0.239373 + 1.032900I$	$-2.98338 + 3.56955I$	0
$u = 1.35887 + 0.47598I$ $a = 0.227188 - 0.474705I$ $b = 0.005261 + 0.633644I$	$-4.54385 - 1.75387I$	0
$u = 1.35887 - 0.47598I$ $a = 0.227188 + 0.474705I$ $b = 0.005261 - 0.633644I$	$-4.54385 + 1.75387I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.488547 + 0.241932I$ $a = -1.66058 - 1.59540I$ $b = -0.692567 - 0.483700I$	$-4.39462 - 4.01027I$	$-12.15712 + 6.29625I$
$u = 0.488547 - 0.241932I$ $a = -1.66058 + 1.59540I$ $b = -0.692567 + 0.483700I$	$-4.39462 + 4.01027I$	$-12.15712 - 6.29625I$
$u = -0.186177 + 0.504914I$ $a = -0.700709 + 0.678816I$ $b = 0.526788 + 0.321365I$	$-0.67069 - 1.40506I$	$-6.14953 + 4.21758I$
$u = -0.186177 - 0.504914I$ $a = -0.700709 - 0.678816I$ $b = 0.526788 - 0.321365I$	$-0.67069 + 1.40506I$	$-6.14953 - 4.21758I$

II. $I_2^u =$
$\langle -u^{15}+4u^{13}+\cdots+b-2,\ -4u^{15}+2u^{14}+\cdots+a-3,\ u^{16}-4u^{14}+\cdots-4u^2+1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2+1 \\ u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u \\ -u^3+u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 4u^{15}-2u^{14}+\cdots-8u+3 \\ u^{15}-4u^{13}+\cdots-2u+2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 3u^{15}-2u^{14}+\cdots-5u+2 \\ 2u^{15}-u^{14}+\cdots-2u+3 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -4u^{15}+3u^{14}+\cdots+5u-3 \\ -u^{11}+u^{10}+3u^9-4u^8-5u^7+8u^6+4u^5-10u^4-3u^3+8u^2+u-2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -4u^{15}+2u^{14}+\cdots+u-2 \\ u^{14}-3u^{12}+6u^{10}+u^9-7u^8-2u^7+9u^6+6u^5-6u^4-6u^3+2u^2+2u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^{15}-u^{14}+\cdots-3u+4 \\ 2u^{15}-u^{14}+\cdots+4u^3+u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -2u^{15}+7u^{13}+\cdots-u^2-u \\ -u^{15}+2u^{14}+\cdots+4u^2+2u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -2u^{15}+7u^{13}+\cdots-u^2-u \\ -u^{15}+2u^{14}+\cdots+4u^2+2u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 11u^{15}-12u^{14}-31u^{13}+38u^{12}+61u^{11}-78u^{10}-68u^9+106u^8+68u^7-95u^6-46u^5+42u^4+16u^3-17u^2+2u-9$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{16} - 4u^{14} + \cdots - 4u^2 + 1$
c_2	$u^{16} + 8u^{15} + \cdots + 8u + 1$
c_3	$u^{16} - 8u^{14} + \cdots + 4u + 1$
c_4	$u^{16} - 4u^{15} + \cdots - 2u + 1$
c_5	$u^{16} - 4u^{14} + \cdots - 4u^2 + 1$
c_6	$u^{16} - u^{15} + \cdots + 3u + 1$
c_7	$u^{16} - 2u^{14} + \cdots + 4u + 1$
c_8	$u^{16} - 3u^{15} + \cdots + u + 1$
c_9	$u^{16} - 8u^{14} + \cdots - 4u + 1$
c_{10}	$u^{16} + u^{15} + \cdots - 3u + 1$
c_{11}	$u^{16} + 3u^{15} + \cdots - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{16} - 8y^{15} + \cdots - 8y + 1$
c_2	$y^{16} + 8y^{15} + \cdots + 12y + 1$
c_3, c_9	$y^{16} - 16y^{15} + \cdots - 22y + 1$
c_4	$y^{16} + 8y^{14} + \cdots + 18y^2 + 1$
c_6, c_{10}	$y^{16} + 13y^{15} + \cdots + 13y + 1$
c_7	$y^{16} - 4y^{15} + \cdots - 6y + 1$
c_8, c_{11}	$y^{16} + 13y^{15} + \cdots + 13y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.743083+0.662007I$ $a=\ \ 1.10772+1.11669I$ $b=-0.68673-1.45406I$	$2.51186-1.38116I$	$-1.59506+3.07074I$
$u=-0.743083-0.662007I$ $a=\ \ 1.10772-1.11669I$ $b=-0.68673+1.45406I$	$2.51186+1.38116I$	$-1.59506-3.07074I$
$u=\ \ 0.885879+0.145084I$ $a=-0.298457+0.589537I$ $b=-0.592866+0.819454I$	$-1.41793+1.66100I$	$-14.4564-2.0605I$
$u=\ \ 0.885879-0.145084I$ $a=-0.298457-0.589537I$ $b=-0.592866-0.819454I$	$-1.41793-1.66100I$	$-14.4564+2.0605I$
$u=-1.043810+0.383036I$ $a=-0.141538-1.091570I$ $b=\ \ 0.247994-0.520970I$	$-6.09539+5.48551I$	$-15.0605-7.1946I$
$u=-1.043810-0.383036I$ $a=-0.141538+1.091570I$ $b=\ \ 0.247994+0.520970I$	$-6.09539-5.48551I$	$-15.0605+7.1946I$
$u=-0.956828+0.652363I$ $a=-1.05291-1.74822I$ $b=-0.85612+1.30516I$	$1.84373+6.50590I$	$-4.33080-8.06359I$
$u=-0.956828-0.652363I$ $a=-1.05291+1.74822I$ $b=-0.85612-1.30516I$	$1.84373-6.50590I$	$-4.33080+8.06359I$
$u=-0.731255+0.295921I$ $a=\ \ 2.09759+1.66067I$ $b=\ \ 0.399130+0.560216I$	$-4.84776-2.55983I$	$-14.7658+4.1285I$
$u=-0.731255-0.295921I$ $a=\ \ 2.09759-1.66067I$ $b=\ \ 0.399130-0.560216I$	$-4.84776+2.55983I$	$-14.7658-4.1285I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.807009 + 0.916229I$ $a = 0.14430 - 1.70974I$ $b = 0.240373 + 0.893634I$	$-2.15077 - 4.46693I$	$-9.53645 + 8.11349I$
$u = 0.807009 - 0.916229I$ $a = 0.14430 + 1.70974I$ $b = 0.240373 - 0.893634I$	$-2.15077 + 4.46693I$	$-9.53645 - 8.11349I$
$u = 0.489877 + 0.414849I$ $a = -1.23723 + 2.02758I$ $b = -0.214471 - 1.388330I$	$1.19758 - 2.88706I$	$-9.08478 + 2.57984I$
$u = 0.489877 - 0.414849I$ $a = -1.23723 - 2.02758I$ $b = -0.214471 + 1.388330I$	$1.19758 + 2.88706I$	$-9.08478 - 2.57984I$
$u = 1.292210 + 0.554134I$ $a = -0.619476 + 0.381495I$ $b = -0.037307 - 0.762535I$	$-4.20079 - 2.10743I$	$-7.17016 + 5.74785I$
$u = 1.292210 - 0.554134I$ $a = -0.619476 - 0.381495I$ $b = -0.037307 + 0.762535I$	$-4.20079 + 2.10743I$	$-7.17016 - 5.74785I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{16}-4u^{14}+\cdots-4u^2+1)(u^{84}+5u^{83}+\cdots-84u-17)$
c_2	$(u^{16}+8u^{15}+\cdots+8u+1)(u^{84}+35u^{83}+\cdots+4574u+289)$
c_3	$(u^{16}-8u^{14}+\cdots+4u+1)(u^{84}-u^{83}+\cdots-344u-313)$
c_4	$(u^{16}-4u^{15}+\cdots-2u+1)(u^{84}-3u^{83}+\cdots-36000u+7373)$
c_5	$(u^{16}-4u^{14}+\cdots-4u^2+1)(u^{84}+5u^{83}+\cdots-84u-17)$
c_6	$(u^{16}-u^{15}+\cdots+3u+1)(u^{84}-2u^{83}+\cdots+2657u+1007)$
c_7	$(u^{16}-2u^{14}+\cdots+4u+1)(u^{84}+u^{83}+\cdots+1236u-149)$
c_8	$(u^{16}-3u^{15}+\cdots+u+1)(u^{84}-4u^{83}+\cdots+943u+169)$
c_9	$(u^{16}-8u^{14}+\cdots-4u+1)(u^{84}-u^{83}+\cdots-344u-313)$
c_{10}	$(u^{16}+u^{15}+\cdots-3u+1)(u^{84}-2u^{83}+\cdots+2657u+1007)$
c_{11}	$(u^{16}+3u^{15}+\cdots-u+1)(u^{84}-4u^{83}+\cdots+943u+169)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{16} - 8y^{15} + \cdots - 8y + 1)(y^{84} - 35y^{83} + \cdots - 4574y + 289)$
c_2	$(y^{16} + 8y^{15} + \cdots + 12y + 1)(y^{84} + 37y^{83} + \cdots + 1003798y + 83521)$
c_3, c_9	$(y^{16} - 16y^{15} + \cdots - 22y + 1)(y^{84} - 63y^{83} + \cdots - 575316y + 97969)$
c_4	$(y^{16} + 8y^{14} + \cdots + 18y^2 + 1)$ $\cdot (y^{84} - 23y^{83} + \cdots - 1969346598y + 54361129)$
c_6, c_{10}	$(y^{16} + 13y^{15} + \cdots + 13y + 1)$ $\cdot (y^{84} + 58y^{83} + \cdots - 14592009y + 1014049)$
c_7	$(y^{16} - 4y^{15} + \cdots - 6y + 1)(y^{84} + 9y^{83} + \cdots - 735016y + 22201)$
c_8, c_{11}	$(y^{16} + 13y^{15} + \cdots + 13y + 1)(y^{84} + 54y^{83} + \cdots - 133481y + 28561)$