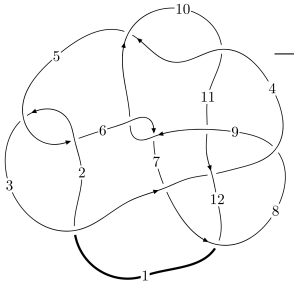
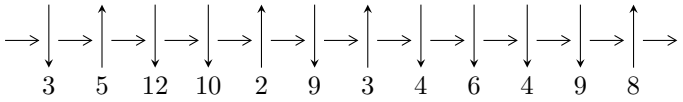
$12n_{0357}$ $(K12n_{0357})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 1.81165 \times 10^{192} u^{72} - 4.45965 \times 10^{192} u^{71} + \cdots + 9.74080 \times 10^{191} b + 1.06210 \times 10^{193},$$
$$- 9.93968 \times 10^{192} u^{72} + 2.39622 \times 10^{193} u^{71} + \cdots + 2.92224 \times 10^{192} a - 7.03543 \times 10^{193},\ u^{73} - 3u^{72} + \cdots +$$
$$I_2^u = \langle 377188189 u^{23} + 1378863855 u^{22} + \cdots + 61167471 b + 138784360,$$
$$- 64492387 u^{23} - 295831704 u^{22} + \cdots + 61167471 a - 153446503,\ u^{24} + 4u^{23} + \cdots - u^3 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 97 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. $\boldsymbol{I_1^u = \langle 1.81 \times 10^{192} u^{72} - 4.46 \times 10^{192} u^{71} + \cdots + 9.74 \times 10^{191} b + 1.06 \times 10^{193},\ -9.94 \times 10^{192} u^{72} + 2.40 \times 10^{193} u^{71} + \cdots + 2.92 \times 10^{192} a - 7.04 \times 10^{193},\ u^{73} - 3u^{72} + \cdots + u - 3 \rangle}$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 3.40139u^{72} - 8.19995u^{71} + \cdots + 26.4023u + 24.0755 \\ -1.85986u^{72} + 4.57832u^{71} + \cdots - 12.4794u - 10.9036 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1.54153u^{72} - 3.62163u^{71} + \cdots + 13.9229u + 13.1719 \\ -1.85986u^{72} + 4.57832u^{71} + \cdots - 12.4794u - 10.9036 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.412176u^{72} - 0.538736u^{71} + \cdots - 4.02065u + 8.34606 \\ -0.637800u^{72} + 1.60567u^{71} + \cdots - 1.74620u - 1.17888 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 3.10355u^{72} - 7.42149u^{71} + \cdots + 22.7807u + 21.0665 \\ -2.37832u^{72} + 5.83272u^{71} + \cdots - 16.2793u - 13.5621 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.78414u^{72} - 3.70642u^{71} + \cdots - 2.38936u + 13.1688 \\ -1.67153u^{72} + 4.07471u^{71} + \cdots - 6.22334u - 6.79645 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1.38239u^{72} - 2.91513u^{71} + \cdots - 1.21923u + 8.34771 \\ -0.332419u^{72} + 0.770717u^{71} + \cdots + 0.944775u + 1.17723 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.04998u^{72} - 2.14441u^{71} + \cdots - 0.274455u + 9.52494 \\ -0.332419u^{72} + 0.770717u^{71} + \cdots + 0.944775u + 1.17723 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -2.32714u^{72} + 5.56801u^{71} + \cdots - 11.8243u - 12.4425 \\ 1.62628u^{72} - 4.17318u^{71} + \cdots + 13.8386u + 5.94494 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.792639u^{72} - 1.56032u^{71} + \cdots - 2.81319u + 7.43157 \\ -0.787015u^{72} + 1.97749u^{71} + \cdots - 2.76778u - 1.53829 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -5.04634u^{72} + 12.1280u^{71} + \cdots - 38.4236u - 37.4607$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{73} + 41u^{72} + \cdots - 695u - 36$
c_2, c_5	$u^{73} - u^{72} + \cdots + 19u + 6$
c_3	$u^{73} - 3u^{72} + \cdots + u - 3$
c_4, c_{10}	$u^{73} + u^{72} + \cdots + 135u + 175$
c_6, c_9	$u^{73} - u^{72} + \cdots - 473u + 111$
c_7	$u^{73} + u^{72} + \cdots - 508170u + 63873$
c_8	$u^{73} - u^{72} + \cdots + 73u + 42$
c_{11}	$u^{73} - 5u^{72} + \cdots - 8735u + 369$
c_{12}	$u^{73} - u^{72} + \cdots - 6229u + 3053$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{73} - 3y^{72} + \cdots + 212737y - 1296$
c_2, c_5	$y^{73} + 41y^{72} + \cdots - 695y - 36$
c_3	$y^{73} + 9y^{72} + \cdots + 217y - 9$
c_4, c_{10}	$y^{73} + 27y^{72} + \cdots - 448325y - 30625$
c_6, c_9	$y^{73} + 31y^{72} + \cdots - 617429y - 12321$
c_7	$y^{73} + 67y^{72} + \cdots - 23854012236y - 4079760129$
c_8	$y^{73} - 65y^{72} + \cdots + 97561y - 1764$
c_{11}	$y^{73} - 65y^{72} + \cdots + 5528239y - 136161$
c_{12}	$y^{73} + 67y^{72} + \cdots - 280201423y - 9320809$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.711770+0.686911I$ $a=\ \ 0.819664+0.526229I$ $b=-0.706906+0.869155I$	$0.79772+1.53809I$	$-4.00000-2.08274I$
$u=-0.711770-0.686911I$ $a=\ \ 0.819664-0.526229I$ $b=-0.706906-0.869155I$	$0.79772-1.53809I$	$-4.00000+2.08274I$
$u=\ \ 0.788897+0.509390I$ $a=-1.278790+0.137287I$ $b=\ \ 1.15632+1.03791I$	$1.73594-4.46923I$	$-6.52811+7.62363I$
$u=\ \ 0.788897-0.509390I$ $a=-1.278790-0.137287I$ $b=\ \ 1.15632-1.03791I$	$1.73594+4.46923I$	$-6.52811-7.62363I$
$u=\ \ 0.224019+1.064990I$ $a=\ \ 0.658185+0.432289I$ $b=\ \ 0.842425-0.465563I$	$4.02793+0.63188I$	0
$u=\ \ 0.224019-1.064990I$ $a=\ \ 0.658185-0.432289I$ $b=\ \ 0.842425+0.465563I$	$4.02793-0.63188I$	0
$u=-0.059789+1.091400I$ $a=-0.912998-0.339473I$ $b=\ \ 1.46708+0.13645I$	$2.19497+4.50938I$	0
$u=-0.059789-1.091400I$ $a=-0.912998+0.339473I$ $b=\ \ 1.46708-0.13645I$	$2.19497-4.50938I$	0
$u=-0.450627+1.002820I$ $a=\ \ 0.785262-0.098480I$ $b=-1.56929+0.22536I$	$2.19555+2.25831I$	0
$u=-0.450627-1.002820I$ $a=\ \ 0.785262+0.098480I$ $b=-1.56929-0.22536I$	$2.19555-2.25831I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.845801+0.149805I$ $a=\ \ 1.232350-0.300012I$ $b=-1.69495+0.48097I$	$-2.08711+5.89222I$	$-9.17584-6.36903I$
$u=-0.845801-0.149805I$ $a=\ \ 1.232350+0.300012I$ $b=-1.69495-0.48097I$	$-2.08711-5.89222I$	$-9.17584+6.36903I$
$u=-0.801731+0.263639I$ $a=-2.20554-0.11514I$ $b=\ \ 0.891373-0.091156I$	$-3.64897+2.39805I$	$-12.44182-6.41492I$
$u=-0.801731-0.263639I$ $a=-2.20554+0.11514I$ $b=\ \ 0.891373+0.091156I$	$-3.64897-2.39805I$	$-12.44182+6.41492I$
$u=-0.732593+0.410229I$ $a=-1.158050-0.281195I$ $b=\ \ 1.220740+0.683681I$	$-3.24555+0.91435I$	$-8.37859-3.23477I$
$u=-0.732593-0.410229I$ $a=-1.158050+0.281195I$ $b=\ \ 1.220740-0.683681I$	$-3.24555-0.91435I$	$-8.37859+3.23477I$
$u=-0.756346+0.324793I$ $a=\ \ 0.10857+1.48519I$ $b=-0.240810+0.118196I$	$0.03493+1.91410I$	$-4.83110-3.77039I$
$u=-0.756346-0.324793I$ $a=\ \ 0.10857-1.48519I$ $b=-0.240810-0.118196I$	$0.03493-1.91410I$	$-4.83110+3.77039I$
$u=-0.231124+1.212990I$ $a=-0.423648+0.609081I$ $b=-0.716380+0.056569I$	$1.91029-2.09743I$	0
$u=-0.231124-1.212990I$ $a=-0.423648-0.609081I$ $b=-0.716380-0.056569I$	$1.91029+2.09743I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.730467 + 0.168977I$ $a = -0.24056 + 2.55593I$ $b = 0.124509 - 0.145261I$	$-1.72884 - 6.88383I$	$-10.38312 + 7.19433I$
$u = 0.730467 - 0.168977I$ $a = -0.24056 - 2.55593I$ $b = 0.124509 + 0.145261I$	$-1.72884 + 6.88383I$	$-10.38312 - 7.19433I$
$u = -0.381226 + 0.641967I$ $a = 1.50889 + 1.91893I$ $b = -0.912723 + 0.730489I$	$0.64051 + 7.83605I$	$-0.10120 - 10.84671I$
$u = -0.381226 - 0.641967I$ $a = 1.50889 - 1.91893I$ $b = -0.912723 - 0.730489I$	$0.64051 - 7.83605I$	$-0.10120 + 10.84671I$
$u = 0.701403 + 0.148645I$ $a = 0.649579 - 0.015762I$ $b = -0.403650 + 1.334880I$	$-4.27706 - 1.66707I$	$-11.95055 + 4.70920I$
$u = 0.701403 - 0.148645I$ $a = 0.649579 + 0.015762I$ $b = -0.403650 - 1.334880I$	$-4.27706 + 1.66707I$	$-11.95055 - 4.70920I$
$u = 0.611556 + 0.280959I$ $a = 2.20649 + 1.40364I$ $b = -0.374732 - 0.043208I$	$-3.81796 - 0.17112I$	$-13.7765 + 5.6990I$
$u = 0.611556 - 0.280959I$ $a = 2.20649 - 1.40364I$ $b = -0.374732 + 0.043208I$	$-3.81796 + 0.17112I$	$-13.7765 - 5.6990I$
$u = 0.482180 + 0.464629I$ $a = -2.30819 + 0.81803I$ $b = 0.987197 + 0.668273I$	$2.76895 - 3.86000I$	$4.66691 + 5.55754I$
$u = 0.482180 - 0.464629I$ $a = -2.30819 - 0.81803I$ $b = 0.987197 - 0.668273I$	$2.76895 + 3.86000I$	$4.66691 - 5.55754I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.154203+0.643235I$ $a=\ \ 0.289103+0.115197I$ $b=\ \ 0.75716-1.36920I$	$3.75316+2.54664I$	$5.49076-1.40011I$
$u=-0.154203-0.643235I$ $a=\ \ 0.289103-0.115197I$ $b=\ \ 0.75716+1.36920I$	$3.75316-2.54664I$	$5.49076+1.40011I$
$u=\ \ 0.445982+0.474227I$ $a=-0.072968+0.236784I$ $b=-0.30309-2.04304I$	$-0.13177-8.00703I$	$-0.8298+14.6532I$
$u=\ \ 0.445982-0.474227I$ $a=-0.072968-0.236784I$ $b=-0.30309+2.04304I$	$-0.13177+8.00703I$	$-0.8298-14.6532I$
$u=-0.379636+0.465015I$ $a=-0.062143+0.470921I$ $b=-0.183528+0.455346I$	$-0.084212+1.082470I$	$-1.38826-6.29344I$
$u=-0.379636-0.465015I$ $a=-0.062143-0.470921I$ $b=-0.183528-0.455346I$	$-0.084212-1.082470I$	$-1.38826+6.29344I$
$u=-0.245626+0.530416I$ $a=-0.835354-0.257006I$ $b=-0.919360-0.589306I$	$0.82387+2.32300I$	$-3.12118-3.65023I$
$u=-0.245626-0.530416I$ $a=-0.835354+0.257006I$ $b=-0.919360+0.589306I$	$0.82387-2.32300I$	$-3.12118+3.65023I$
$u=\ \ 1.09746+0.93248I$ $a=\ \ 1.165710-0.423069I$ $b=-1.69073-0.35921I$	$-8.64924-0.47663I$	0
$u=\ \ 1.09746-0.93248I$ $a=\ \ 1.165710+0.423069I$ $b=-1.69073+0.35921I$	$-8.64924+0.47663I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.03821+1.44557I$ $a=\ \ 0.419014+0.311831I$ $b=-0.121814-0.282796I$	$7.26330+0.79424I$	0
$u=-0.03821-1.44557I$ $a=\ \ 0.419014-0.311831I$ $b=-0.121814+0.282796I$	$7.26330-0.79424I$	0
$u=\ \ 0.522346+0.135295I$ $a=-1.73569-1.33736I$ $b=\ \ 1.151230+0.320801I$	$2.44865-2.72547I$	$-0.98848+3.99656I$
$u=\ \ 0.522346-0.135295I$ $a=-1.73569+1.33736I$ $b=\ \ 1.151230-0.320801I$	$2.44865+2.72547I$	$-0.98848-3.99656I$
$u=\ \ 0.529186$ $a=\ \ 2.32017$ $b=-0.976528$	-1.76032	-4.48430
$u=\ \ 1.03407+1.05725I$ $a=-0.895281+0.313648I$ $b=\ \ 1.66291+0.49054I$	$-9.47345-4.85925I$	0
$u=\ \ 1.03407-1.05725I$ $a=-0.895281-0.313648I$ $b=\ \ 1.66291-0.49054I$	$-9.47345+4.85925I$	0
$u=\ \ 1.08539+1.01319I$ $a=-0.649568+0.696904I$ $b=\ \ 1.337990+0.293620I$	$-9.65085-2.86615I$	0
$u=\ \ 1.08539-1.01319I$ $a=-0.649568-0.696904I$ $b=\ \ 1.337990-0.293620I$	$-9.65085+2.86615I$	0
$u=\ \ 0.98164+1.12301I$ $a=\ \ 0.809172-0.868353I$ $b=-1.52323-0.11626I$	$-8.01190-7.13354I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.98164 - 1.12301I$ $a = 0.809172 + 0.868353I$ $b = -1.52323 + 0.11626I$	$-8.01190 + 7.13354I$	0
$u = 1.16275 + 0.94037I$ $a = 1.145480 - 0.346183I$ $b = -1.44811 - 0.68459I$	$-8.15838 - 9.01433I$	0
$u = 1.16275 - 0.94037I$ $a = 1.145480 + 0.346183I$ $b = -1.44811 + 0.68459I$	$-8.15838 + 9.01433I$	0
$u = -1.08700 + 1.03138I$ $a = -1.088610 - 0.601686I$ $b = 1.378680 - 0.228755I$	$-5.09007 + 3.96389I$	0
$u = -1.08700 - 1.03138I$ $a = -1.088610 + 0.601686I$ $b = 1.378680 + 0.228755I$	$-5.09007 - 3.96389I$	0
$u = -1.14886 + 0.98319I$ $a = -1.095960 - 0.405225I$ $b = 1.39801 - 0.42975I$	$-5.17491 + 4.47680I$	0
$u = -1.14886 - 0.98319I$ $a = -1.095960 + 0.405225I$ $b = 1.39801 + 0.42975I$	$-5.17491 - 4.47680I$	0
$u = -1.19459 + 0.97908I$ $a = 0.713464 + 0.719383I$ $b = -1.268230 - 0.006930I$	$-3.35645 - 1.89703I$	0
$u = -1.19459 - 0.97908I$ $a = 0.713464 - 0.719383I$ $b = -1.268230 + 0.006930I$	$-3.35645 + 1.89703I$	0
$u = -1.06511 + 1.12982I$ $a = 1.080960 + 0.314940I$ $b = -1.58993 + 0.59363I$	$-2.83469 + 10.02650I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.06511-1.12982I$ $a=\ \ 1.080960-0.314940I$ $b=-1.58993-0.59363I$	$-2.83469-10.02650I$	0
$u=\ \ 1.08721+1.11899I$ $a=-1.142380+0.386017I$ $b=\ \ 1.61370+0.67386I$	$-5.8665-16.5000I$	0
$u=\ \ 1.08721-1.11899I$ $a=-1.142380-0.386017I$ $b=\ \ 1.61370-0.67386I$	$-5.8665+16.5000I$	0
$u=-0.18127+1.56234I$ $a=-0.378264+0.227158I$ $b=\ \ 0.261801-0.024901I$	$6.32157+5.12094I$	0
$u=-0.18127-1.56234I$ $a=-0.378264-0.227158I$ $b=\ \ 0.261801+0.024901I$	$6.32157-5.12094I$	0
$u=\ \ 1.20934+1.04042I$ $a=-0.709244+0.702670I$ $b=\ \ 1.371640-0.142965I$	$-6.20784+8.23625I$	0
$u=\ \ 1.20934-1.04042I$ $a=-0.709244-0.702670I$ $b=\ \ 1.371640+0.142965I$	$-6.20784-8.23625I$	0
$u=-1.10888+1.15654I$ $a=-0.810172-0.543238I$ $b=\ \ 1.272410-0.096770I$	$-4.67517+3.68408I$	0
$u=-1.10888-1.15654I$ $a=-0.810172+0.543238I$ $b=\ \ 1.272410+0.096770I$	$-4.67517-3.68408I$	0
$u=\ \ 1.02752+1.23429I$ $a=\ \ 0.580816-0.597525I$ $b=-1.310540+0.134265I$	$-7.25042+0.97681I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.02752 - 1.23429I$ $a = 0.580816 + 0.597525I$ $b = -1.310540 - 0.134265I$	$-7.25042 - 0.97681I$	0
$u = -0.382422 + 0.042516I$ $a = -0.66270 + 2.29057I$ $b = -0.928905 - 0.097447I$	$0.76436 + 2.18087I$	$-2.77786 - 2.58179I$
$u = -0.382422 - 0.042516I$ $a = -0.66270 - 2.29057I$ $b = -0.928905 + 0.097447I$	$0.76436 - 2.18087I$	$-2.77786 + 2.58179I$

II.

$\boldsymbol{I_2^u = \langle 3.77\times 10^8 u^{23} + 1.38\times 10^9 u^{22} + \cdots + 6.12\times 10^7 b + 1.39\times 10^8,\ -6.45\times 10^7 u^{23} - 2.96\times 10^8 u^{22} + \cdots + 6.12\times 10^7 a - 1.53\times 10^8,\ u^{24} + 4u^{23} + \cdots - u^3 + 1\rangle}$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 1.05436u^{23} + 4.83642u^{22} + \cdots + 0.636746u + 2.50863 \\ -6.16648u^{23} - 22.5424u^{22} + \cdots - 2.86681u - 2.26892 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -5.11213u^{23} - 17.7060u^{22} + \cdots - 2.23006u + 0.239705 \\ -6.16648u^{23} - 22.5424u^{22} + \cdots - 2.86681u - 2.26892 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.507319u^{23} - 2.59043u^{22} + \cdots - 5.26978u - 1.75691 \\ 2.50293u^{23} + 12.8587u^{22} + \cdots - 1.24532u + 5.01141 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -3.60920u^{23} - 8.84729u^{22} + \cdots - 4.47538u + 5.25112 \\ -3.62222u^{23} - 11.4716u^{22} + \cdots - 1.36388u + 0.578101 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -3.13956u^{23} - 10.0674u^{22} + \cdots + 0.934275u + 2.98255 \\ -9.85454u^{23} - 37.4415u^{22} + \cdots - 7.12656u - 3.56118 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 2.22207u^{23} + 6.52071u^{22} + \cdots + 3.73821u - 2.62904 \\ -5.23232u^{23} - 21.9699u^{22} + \cdots - 5.76267u - 4.13928 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -3.01024u^{23} - 15.4492u^{22} + \cdots - 2.02447u - 6.76832 \\ -5.23232u^{23} - 21.9699u^{22} + \cdots - 5.76267u - 4.13928 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -7.56886u^{23} - 23.4335u^{22} + \cdots - 7.91950u + 3.21038 \\ -3.52029u^{23} - 8.69117u^{22} + \cdots - 3.89922u + 3.70832 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -4.43896u^{23} - 21.7559u^{22} + \cdots - 4.53179u - 7.32947 \\ -2.34593u^{23} - 7.11088u^{22} + \cdots - 5.17696u + 1.57248 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{333484440}{20389157}u^{23} - \frac{1521347308}{20389157}u^{22} + \cdots - \frac{280854901}{20389157}u - \frac{357663045}{20389157}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{24} - 14u^{23} + \cdots - 18u + 1$
c_2	$u^{24} + 2u^{23} + \cdots + 2u + 1$
c_3	$u^{24} + 4u^{23} + \cdots - u^3 + 1$
c_4	$u^{24} + 10u^{22} + \cdots + 4u + 3$
c_5	$u^{24} - 2u^{23} + \cdots - 2u + 1$
c_6	$u^{24} - 8u^{23} + \cdots + 2u + 1$
c_7	$u^{24} + 4u^{22} + \cdots + u + 1$
c_8	$u^{24} - 10u^{22} + \cdots + 4u + 5$
c_9	$u^{24} + 8u^{23} + \cdots - 2u + 1$
c_{10}	$u^{24} + 10u^{22} + \cdots - 4u + 3$
c_{11}	$u^{24} + 4u^{23} + \cdots - 2u + 1$
c_{12}	$u^{24} + 10u^{22} + \cdots + 8u + 3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{24} + 6y^{23} + \cdots - 6y + 1$
c_2, c_5	$y^{24} + 14y^{23} + \cdots + 18y + 1$
c_3	$y^{24} + 14y^{23} + \cdots + 14y^2 + 1$
c_4, c_{10}	$y^{24} + 20y^{23} + \cdots + 122y + 9$
c_6, c_9	$y^{24} + 12y^{23} + \cdots - 2y + 1$
c_7	$y^{24} + 8y^{23} + \cdots - 7y + 1$
c_8	$y^{24} - 20y^{23} + \cdots - 286y + 25$
c_{11}	$y^{24} - 12y^{23} + \cdots + 6y + 1$
c_{12}	$y^{24} + 20y^{23} + \cdots + 80y + 9$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.199272+0.958048I$ $a=-0.889600+0.760341I$ $b=-0.694132-0.404316I$	$4.28901-1.44360I$	$1.41377+5.79829I$
$u=-0.199272-0.958048I$ $a=-0.889600-0.760341I$ $b=-0.694132+0.404316I$	$4.28901+1.44360I$	$1.41377-5.79829I$
$u=-0.837058+0.470777I$ $a=-1.130140-0.152035I$ $b=\ \ 0.725967+0.268883I$	$-2.48671+2.11960I$	$-2.65124-5.25578I$
$u=-0.837058-0.470777I$ $a=-1.130140+0.152035I$ $b=\ \ 0.725967-0.268883I$	$-2.48671-2.11960I$	$-2.65124+5.25578I$
$u=-0.283438+0.916379I$ $a=-0.913375-0.068108I$ $b=\ \ 1.82850+0.22031I$	$2.10464+3.05536I$	$0.83554-7.05948I$
$u=-0.283438-0.916379I$ $a=-0.913375+0.068108I$ $b=\ \ 1.82850-0.22031I$	$2.10464-3.05536I$	$0.83554+7.05948I$
$u=-0.138505+1.039690I$ $a=\ \ 0.799603-0.465724I$ $b=\ \ 0.703884-0.449109I$	$2.52748-1.32868I$	$1.87192-0.43201I$
$u=-0.138505-1.039690I$ $a=\ \ 0.799603+0.465724I$ $b=\ \ 0.703884+0.449109I$	$2.52748+1.32868I$	$1.87192+0.43201I$
$u=-0.299383+0.788402I$ $a=\ \ 1.086920+0.158296I$ $b=-1.57428+0.71805I$	$3.62116+3.70221I$	$5.08118-6.89552I$
$u=-0.299383-0.788402I$ $a=\ \ 1.086920-0.158296I$ $b=-1.57428-0.71805I$	$3.62116-3.70221I$	$5.08118+6.89552I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.713401+0.354517I$ $a=1.78472+0.24582I$ $b=-1.015590+0.801786I$	$2.11896+3.55103I$	$-4.92325-0.41025I$
$u=-0.713401-0.354517I$ $a=1.78472-0.24582I$ $b=-1.015590-0.801786I$	$2.11896-3.55103I$	$-4.92325+0.41025I$
$u=0.421205+0.385110I$ $a=2.17804-0.11797I$ $b=-0.407933+0.616082I$	$-3.43668+0.35997I$	$-5.57821-4.47507I$
$u=0.421205-0.385110I$ $a=2.17804+0.11797I$ $b=-0.407933-0.616082I$	$-3.43668-0.35997I$	$-5.57821+4.47507I$
$u=1.04468+1.04140I$ $a=0.778881-0.502263I$ $b=-1.49157-0.38772I$	$-9.20200-3.82998I$	$-4.00000+2.33150I$
$u=1.04468-1.04140I$ $a=0.778881+0.502263I$ $b=-1.49157+0.38772I$	$-9.20200+3.82998I$	$-4.00000-2.33150I$
$u=0.421357+0.209500I$ $a=-1.51495+1.81192I$ $b=0.643573+1.174640I$	$-0.51254-7.32074I$	$-6.31406+5.93822I$
$u=0.421357-0.209500I$ $a=-1.51495-1.81192I$ $b=0.643573-1.174640I$	$-0.51254+7.32074I$	$-6.31406-5.93822I$
$u=-1.14750+1.05301I$ $a=-1.085120-0.546883I$ $b=1.332100-0.203079I$	$-5.35357+4.13899I$	$-19.8997-11.3641I$
$u=-1.14750-1.05301I$ $a=-1.085120+0.546883I$ $b=1.332100+0.203079I$	$-5.35357-4.13899I$	$-19.8997+11.3641I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.21749+1.54667I$ $a=\ \ 0.159735+0.255362I$ $b=-0.672542-0.322370I$	$6.81021+0.26234I$	$-4.00000+2.41284I$
$u=-0.21749-1.54667I$ $a=\ \ 0.159735-0.255362I$ $b=-0.672542+0.322370I$	$6.81021-0.26234I$	$-4.00000-2.41284I$
$u=-0.05120+1.63287I$ $a=-0.254705+0.022425I$ $b=\ \ 0.622030-0.278029I$	$6.09978+5.59765I$	$-4.00000-10.59929I$
$u=-0.05120-1.63287I$ $a=-0.254705-0.022425I$ $b=\ \ 0.622030+0.278029I$	$6.09978-5.59765I$	$-4.00000+10.59929I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{24}-14u^{23}+\cdots-18u+1)(u^{73}+41u^{72}+\cdots-695u-36)$
c_2	$(u^{24}+2u^{23}+\cdots+2u+1)(u^{73}-u^{72}+\cdots+19u+6)$
c_3	$(u^{24}+4u^{23}+\cdots-u^3+1)(u^{73}-3u^{72}+\cdots+u-3)$
c_4	$(u^{24}+10u^{22}+\cdots+4u+3)(u^{73}+u^{72}+\cdots+135u+175)$
c_5	$(u^{24}-2u^{23}+\cdots-2u+1)(u^{73}-u^{72}+\cdots+19u+6)$
c_6	$(u^{24}-8u^{23}+\cdots+2u+1)(u^{73}-u^{72}+\cdots-473u+111)$
c_7	$(u^{24}+4u^{22}+\cdots+u+1)(u^{73}+u^{72}+\cdots-508170u+63873)$
c_8	$(u^{24}-10u^{22}+\cdots+4u+5)(u^{73}-u^{72}+\cdots+73u+42)$
c_9	$(u^{24}+8u^{23}+\cdots-2u+1)(u^{73}-u^{72}+\cdots-473u+111)$
c_{10}	$(u^{24}+10u^{22}+\cdots-4u+3)(u^{73}+u^{72}+\cdots+135u+175)$
c_{11}	$(u^{24}+4u^{23}+\cdots-2u+1)(u^{73}-5u^{72}+\cdots-8735u+369)$
c_{12}	$(u^{24}+10u^{22}+\cdots+8u+3)(u^{73}-u^{72}+\cdots-6229u+3053)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{24}+6y^{23}+\cdots-6y+1)(y^{73}-3y^{72}+\cdots+212737y-1296)$
c_2, c_5	$(y^{24}+14y^{23}+\cdots+18y+1)(y^{73}+41y^{72}+\cdots-695y-36)$
c_3	$(y^{24}+14y^{23}+\cdots+14y^2+1)(y^{73}+9y^{72}+\cdots+217y-9)$
c_4, c_{10}	$(y^{24}+20y^{23}+\cdots+122y+9)(y^{73}+27y^{72}+\cdots-448325y-30625)$
c_6, c_9	$(y^{24}+12y^{23}+\cdots-2y+1)(y^{73}+31y^{72}+\cdots-617429y-12321)$
c_7	$(y^{24}+8y^{23}+\cdots-7y+1)$ $\cdot(y^{73}+67y^{72}+\cdots-23854012236y-4079760129)$
c_8	$(y^{24}-20y^{23}+\cdots-286y+25)(y^{73}-65y^{72}+\cdots+97561y-1764)$
c_{11}	$(y^{24}-12y^{23}+\cdots+6y+1)(y^{73}-65y^{72}+\cdots+5528239y-136161)$
c_{12}	$(y^{24}+20y^{23}+\cdots+80y+9)$ $\cdot(y^{73}+67y^{72}+\cdots-280201423y-9320809)$