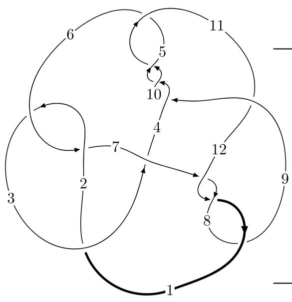
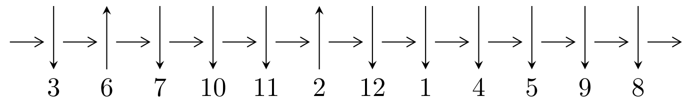
$12a_{0252}$ $(K12a_{0252})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -3.93238 \times 10^{36} u^{70} - 5.06587 \times 10^{36} u^{69} + \cdots + 5.33198 \times 10^{36} b + 2.44647 \times 10^{37}, \\ & 5.07711 \times 10^{36} u^{70} - 1.19436 \times 10^{37} u^{69} + \cdots + 5.33198 \times 10^{36} a + 4.10693 \times 10^{37},\ u^{71} - u^{70} + \cdots - 4u + 4 \rangle \\ I_2^u = \langle & -au + b + 1,\ 2a^2 + au + 2a + 2u + 3,\ u^2 - 2 \rangle \end{aligned}$$

$$I_1^v = \langle a,\ b + v,\ v^2 + v + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 77 representations.

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[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.
$$\boldsymbol{I_1^u = \langle -3.93\times 10^{36}u^{70} - 5.07\times 10^{36}u^{69} + \cdots + 5.33\times 10^{36}b + 2.45\times 10^{37},\ 5.08\times 10^{36}u^{70} - 1.19\times 10^{37}u^{69} + \cdots + 5.33\times 10^{36}a + 4.11\times 10^{37},\ u^{71} - u^{70} + \cdots - 4u + 4\rangle}$$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.952200u^{70} + 2.23999u^{69} + \cdots + 20.1357u - 7.70244 \\ 0.737508u^{70} + 0.950092u^{69} + \cdots + 6.24797u - 4.58829 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.741052u^{70} + 2.20642u^{69} + \cdots + 17.4237u - 7.13958 \\ 1.16557u^{70} + 1.11369u^{69} + \cdots + 6.11369u - 5.29860 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -1.16962u^{70} + 1.25814u^{69} + \cdots + 8.82584u - 2.37901 \\ -0.630401u^{70} - 0.239711u^{69} + \cdots - 3.62581u + 2.09462 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.429711u^{70} + 0.940016u^{69} + \cdots + 10.0861u - 2.73375 \\ 0.311878u^{70} - 0.164899u^{69} + \cdots + 1.39448u - 0.301335 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u^2 + 1 \\ -u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -u^7 + 4u^5 - 4u^3 \\ -u^7 + 3u^5 - 2u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -0.518233u^{70} + 1.13571u^{69} + \cdots + 3.53681u - 1.30370 \\ -0.0840621u^{70} + 0.422232u^{69} + \cdots - 1.48260u - 0.530560 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 2.34776u^{70} - 2.08944u^{69} + \cdots - 14.6022u - 7.88015$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{71} + 34u^{70} + \cdots + 6u - 1$
c_2, c_6	$u^{71} - 2u^{70} + \cdots - 2u - 1$
c_3	$u^{71} + 2u^{70} + \cdots - 3942u - 797$
c_4, c_5, c_9 c_{10}	$u^{71} + u^{70} + \cdots - 4u - 4$
c_7, c_8, c_{12}	$u^{71} + 3u^{70} + \cdots + 19u - 7$
c_{11}	$u^{71} - 15u^{70} + \cdots + 3072u - 1792$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{71} + 10y^{70} + \cdots + 62y - 1$
c_2, c_6	$y^{71} + 34y^{70} + \cdots + 6y - 1$
c_3	$y^{71} - 14y^{70} + \cdots + 18751274y - 635209$
c_4, c_5, c_9 c_{10}	$y^{71} - 81y^{70} + \cdots + 176y - 16$
c_7, c_8, c_{12}	$y^{71} - 63y^{70} + \cdots - 17y - 49$
c_{11}	$y^{71} + 11y^{70} + \cdots - 2719744y - 3211264$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.974962$ $a = -0.132568$ $b = -0.762090$	-6.07387	0
$u = 1.041460 + 0.273367I$ $a = -0.83444 - 1.61294I$ $b = -0.309992 - 0.982745I$	$-9.26803 - 3.63527I$	0
$u = 1.041460 - 0.273367I$ $a = -0.83444 + 1.61294I$ $b = -0.309992 + 0.982745I$	$-9.26803 + 3.63527I$	0
$u = -0.683517 + 0.613751I$ $a = -1.85094 + 1.31765I$ $b = 0.360642 + 0.541603I$	$-4.89636 + 11.68020I$	0
$u = -0.683517 - 0.613751I$ $a = -1.85094 - 1.31765I$ $b = 0.360642 - 0.541603I$	$-4.89636 - 11.68020I$	0
$u = -0.744307 + 0.516977I$ $a = 0.718389 - 1.009080I$ $b = -0.783067 + 0.302046I$	$-7.31151 + 3.80947I$	$-16.8222 + 0.I$
$u = -0.744307 - 0.516977I$ $a = 0.718389 + 1.009080I$ $b = -0.783067 - 0.302046I$	$-7.31151 - 3.80947I$	$-16.8222 + 0.I$
$u = 0.661129 + 0.571595I$ $a = -0.138662 - 0.821456I$ $b = -0.180040 - 0.537662I$	$-2.56545 - 6.56727I$	$-10.30221 + 5.89278I$
$u = 0.661129 - 0.571595I$ $a = -0.138662 + 0.821456I$ $b = -0.180040 + 0.537662I$	$-2.56545 + 6.56727I$	$-10.30221 - 5.89278I$
$u = 0.617792 + 0.529373I$ $a = -2.11045 - 1.58230I$ $b = 0.257256 - 0.453919I$	$0.22354 - 7.65304I$	$-8.99939 + 9.03031I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.617792 - 0.529373I$ $a = -2.11045 + 1.58230I$ $b = 0.257256 + 0.453919I$	$0.22354 + 7.65304I$	$-8.99939 - 9.03031I$
$u = -0.288994 + 0.715682I$ $a = 0.753951 + 0.022023I$ $b = 0.23407 - 1.43165I$	$-3.71427 - 7.22650I$	$-11.76200 + 4.77338I$
$u = -0.288994 - 0.715682I$ $a = 0.753951 - 0.022023I$ $b = 0.23407 + 1.43165I$	$-3.71427 + 7.22650I$	$-11.76200 - 4.77338I$
$u = -0.555286 + 0.514091I$ $a = 0.029022 + 0.997262I$ $b = -0.126622 + 0.427682I$	$2.23050 + 2.79648I$	$-5.08952 - 4.76680I$
$u = -0.555286 - 0.514091I$ $a = 0.029022 - 0.997262I$ $b = -0.126622 - 0.427682I$	$2.23050 - 2.79648I$	$-5.08952 + 4.76680I$
$u = 0.555198 + 0.441849I$ $a = 1.154400 + 0.039318I$ $b = 0.802206 - 0.072715I$	$-1.00765 - 4.12329I$	$-9.75666 + 7.48395I$
$u = 0.555198 - 0.441849I$ $a = 1.154400 - 0.039318I$ $b = 0.802206 + 0.072715I$	$-1.00765 + 4.12329I$	$-9.75666 - 7.48395I$
$u = 0.284882 + 0.644950I$ $a = 1.080530 + 0.041177I$ $b = 0.317243 + 0.055472I$	$-1.45298 + 2.44652I$	$-8.12987 - 0.62519I$
$u = 0.284882 - 0.644950I$ $a = 1.080530 - 0.041177I$ $b = 0.317243 - 0.055472I$	$-1.45298 - 2.44652I$	$-8.12987 + 0.62519I$
$u = 0.611937 + 0.345920I$ $a = 1.19608 + 1.32035I$ $b = -0.493119 - 0.166503I$	$-1.94003 - 0.80211I$	$-13.09901 + 4.19449I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.611937 - 0.345920I$ $a = 1.19608 - 1.32035I$ $b = -0.493119 + 0.166503I$	$-1.94003 + 0.80211I$	$-13.09901 - 4.19449I$
$u = -0.148480 + 0.684433I$ $a = 0.856675 - 0.243803I$ $b = -0.146478 + 1.028510I$	$-5.49853 + 0.20966I$	$-14.2031 - 1.3385I$
$u = -0.148480 - 0.684433I$ $a = 0.856675 + 0.243803I$ $b = -0.146478 - 1.028510I$	$-5.49853 - 0.20966I$	$-14.2031 + 1.3385I$
$u = 1.281050 + 0.223593I$ $a = -0.145673 + 1.042540I$ $b = -1.317600 + 0.481811I$	$-8.63854 + 3.81527I$	0
$u = 1.281050 - 0.223593I$ $a = -0.145673 - 1.042540I$ $b = -1.317600 - 0.481811I$	$-8.63854 - 3.81527I$	0
$u = -0.399835 + 0.531286I$ $a = 1.111270 - 0.044872I$ $b = 0.493071 + 0.030498I$	$2.68818 + 0.83256I$	$-3.03948 - 3.39872I$
$u = -0.399835 - 0.531286I$ $a = 1.111270 + 0.044872I$ $b = 0.493071 - 0.030498I$	$2.68818 - 0.83256I$	$-3.03948 + 3.39872I$
$u = -0.562198 + 0.354555I$ $a = -2.26602 + 2.56094I$ $b = 0.071941 + 0.357866I$	$-2.07090 + 3.34227I$	$-13.0075 - 6.0861I$
$u = -0.562198 - 0.354555I$ $a = -2.26602 - 2.56094I$ $b = 0.071941 - 0.357866I$	$-2.07090 - 3.34227I$	$-13.0075 + 6.0861I$
$u = -0.662402 + 0.022295I$ $a = 0.32012 - 2.79437I$ $b = -0.334133 - 0.224554I$	$-2.89598 - 2.84826I$	$-16.4142 + 5.1408I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.662402 - 0.022295I$ $a = 0.32012 + 2.79437I$ $b = -0.334133 + 0.224554I$	$-2.89598 + 2.84826I$	$-16.4142 - 5.1408I$
$u = 0.319547 + 0.564821I$ $a = 0.815652 + 0.018623I$ $b = 0.373590 + 1.327950I$	$1.09698 + 3.88412I$	$-5.83336 - 2.81724I$
$u = 0.319547 - 0.564821I$ $a = 0.815652 - 0.018623I$ $b = 0.373590 - 1.327950I$	$1.09698 - 3.88412I$	$-5.83336 + 2.81724I$
$u = -1.382810 + 0.085315I$ $a = -0.770899 + 0.369521I$ $b = -1.73606 + 0.52292I$	$-6.41810 + 0.14375I$	0
$u = -1.382810 - 0.085315I$ $a = -0.770899 - 0.369521I$ $b = -1.73606 - 0.52292I$	$-6.41810 - 0.14375I$	0
$u = -0.509163 + 0.332791I$ $a = 0.901210 - 0.137186I$ $b = 0.70921 - 1.26609I$	$-1.87792 - 0.91954I$	$-12.51300 - 2.70436I$
$u = -0.509163 - 0.332791I$ $a = 0.901210 + 0.137186I$ $b = 0.70921 + 1.26609I$	$-1.87792 + 0.91954I$	$-12.51300 + 2.70436I$
$u = 0.396419 + 0.434178I$ $a = 0.55903 - 1.50302I$ $b = -0.056466 - 0.287345I$	$-0.545124 + 0.994643I$	$-7.84415 + 1.46512I$
$u = 0.396419 - 0.434178I$ $a = 0.55903 + 1.50302I$ $b = -0.056466 + 0.287345I$	$-0.545124 - 0.994643I$	$-7.84415 - 1.46512I$
$u = -1.44238 + 0.08576I$ $a = -0.349916 - 0.860243I$ $b = -1.51352 - 0.74219I$	$-4.43692 - 1.78201I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.44238 - 0.08576I$ $a = -0.349916 + 0.860243I$ $b = -1.51352 + 0.74219I$	$-4.43692 + 1.78201I$	0
$u = 1.48243 + 0.11601I$ $a = -0.503110 - 0.588443I$ $b = -1.54844 - 0.83999I$	$-3.44891 - 3.00583I$	0
$u = 1.48243 - 0.11601I$ $a = -0.503110 + 0.588443I$ $b = -1.54844 + 0.83999I$	$-3.44891 + 3.00583I$	0
$u = -1.52603 + 0.07657I$ $a = -0.792598 - 0.307607I$ $b = -1.30084 - 0.77169I$	$-6.95261 + 0.55649I$	0
$u = -1.52603 - 0.07657I$ $a = -0.792598 + 0.307607I$ $b = -1.30084 + 0.77169I$	$-6.95261 - 0.55649I$	0
$u = 1.55290 + 0.14230I$ $a = -0.540917 + 0.452635I$ $b = -0.733603 + 1.181220I$	$-4.83267 - 5.13999I$	0
$u = 1.55290 - 0.14230I$ $a = -0.540917 - 0.452635I$ $b = -0.733603 - 1.181220I$	$-4.83267 + 5.13999I$	0
$u = 1.55861 + 0.09132I$ $a = -0.303039 + 0.740752I$ $b = -1.64578 + 0.75593I$	$-8.96219 - 0.58402I$	0
$u = 1.55861 - 0.09132I$ $a = -0.303039 - 0.740752I$ $b = -1.64578 - 0.75593I$	$-8.96219 + 0.58402I$	0
$u = 0.437893$ $a = 0.702032$ $b = -0.178433$	-0.692654	-14.1050

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.56098 + 0.11999I$ $a = -0.416452 + 0.590189I$ $b = -1.56200 + 0.90423I$	$-8.16520 + 6.12024I$	0
$u = -1.56098 - 0.11999I$ $a = -0.416452 - 0.590189I$ $b = -1.56200 - 0.90423I$	$-8.16520 - 6.12024I$	0
$u = 1.56896 + 0.10229I$ $a = 1.02180 + 2.69391I$ $b = 2.15590 + 5.82172I$	$-9.34889 - 5.00736I$	0
$u = 1.56896 - 0.10229I$ $a = 1.02180 - 2.69391I$ $b = 2.15590 - 5.82172I$	$-9.34889 + 5.00736I$	0
$u = -1.57483 + 0.09927I$ $a = -0.75369 + 2.16400I$ $b = -0.95108 + 4.45781I$	$-9.36775 + 2.43571I$	0
$u = -1.57483 - 0.09927I$ $a = -0.75369 - 2.16400I$ $b = -0.95108 - 4.45781I$	$-9.36775 - 2.43571I$	0
$u = 1.58020 + 0.03046I$ $a = -0.41422 - 2.66376I$ $b = -0.43461 - 5.57845I$	$-10.52460 + 2.50482I$	0
$u = 1.58020 - 0.03046I$ $a = -0.41422 + 2.66376I$ $b = -0.43461 + 5.57845I$	$-10.52460 - 2.50482I$	0
$u = -1.57417 + 0.15470I$ $a = 1.25068 - 2.27271I$ $b = 2.53079 - 5.06207I$	$-7.14402 + 10.15450I$	0
$u = -1.57417 - 0.15470I$ $a = 1.25068 + 2.27271I$ $b = 2.53079 + 5.06207I$	$-7.14402 - 10.15450I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.58909+0.17273I$ $a=-0.405664-0.412866I$ $b=-0.391537-1.150890I$	$-10.12550+9.32824I$	0
$u=-1.58909-0.17273I$ $a=-0.405664+0.412866I$ $b=-0.391537+1.150890I$	$-10.12550-9.32824I$	0
$u=\ \ 0.089398+0.387096I$ $a=\ \ 0.988618+0.088778I$ $b=\ \ 0.248296-0.842415I$	$-0.50745-1.65056I$	$-4.58929+3.33883I$
$u=\ \ 0.089398-0.387096I$ $a=\ \ 0.988618-0.088778I$ $b=\ \ 0.248296+0.842415I$	$-0.50745+1.65056I$	$-4.58929-3.33883I$
$u=\ \ 1.59787+0.18877I$ $a=\ \ 1.18769+2.00228I$ $b=\ \ 2.37919+4.60569I$	$-12.5488-14.6759I$	0
$u=\ \ 1.59787-0.18877I$ $a=\ \ 1.18769-2.00228I$ $b=\ \ 2.37919-4.60569I$	$-12.5488+14.6759I$	0
$u=\ \ 1.61397+0.14947I$ $a=-0.59553-1.87276I$ $b=-0.44662-3.91654I$	$-15.3002-6.3034I$	0
$u=\ \ 1.61397-0.14947I$ $a=-0.59553+1.87276I$ $b=-0.44662+3.91654I$	$-15.3002+6.3034I$	0
$u=\ \ 1.63502$ $a=-0.507683$ $b=-0.526412$	-14.8851	0
$u=-1.65827+0.02787I$ $a=\ \ 0.21619-2.25531I$ $b=\ \ 0.81168-5.01290I$	$-18.5709+4.4255I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.65827 - 0.02787I$		
$a = 0.21619 + 2.25531I$	$-18.5709 - 4.4255I$	0
$b = 0.81168 + 5.01290I$		

II. $I_2^u = \langle -au + b + 1,\ 2a^2 + au + 2a + 2u + 3,\ u^2 - 2 \rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} a \\ au - 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} au - a - 1 \\ 3au - 4a - 3 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -\frac{1}{2}u \\ au - 2a - u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -\frac{1}{2}u \\ au - 2a - u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1 \\ -2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ -u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -\frac{1}{2}u \\ au - 2a - 2u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4au - 8a - 16$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u^2 - u + 1)^2$
c_3, c_6	$(u^2 + u + 1)^2$
c_4, c_5, c_9 c_{10}	$(u^2 - 2)^2$
c_7, c_8	$(u + 1)^4$
c_{11}	u^4
c_{12}	$(u - 1)^4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_6	$(y^2 + y + 1)^2$
c_4, c_5, c_9 c_{10}	$(y - 2)^4$
c_7, c_8, c_{12}	$(y - 1)^4$
c_{11}	y^4

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.41421$ $a = -0.85355 + 1.47840I$ $b = -2.20711 + 2.09077I$	$-6.57974 + 2.02988I$	$-14.0000 - 3.4641I$
$u = 1.41421$ $a = -0.85355 - 1.47840I$ $b = -2.20711 - 2.09077I$	$-6.57974 - 2.02988I$	$-14.0000 + 3.4641I$
$u = -1.41421$ $a = -0.146447 + 0.253653I$ $b = -0.792893 - 0.358719I$	$-6.57974 + 2.02988I$	$-14.0000 - 3.4641I$
$u = -1.41421$ $a = -0.146447 - 0.253653I$ $b = -0.792893 + 0.358719I$	$-6.57974 - 2.02988I$	$-14.0000 + 3.4641I$

III. $I_1^v = \langle a,\ b+v,\ v^2+v+1\rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}v\\0\end{pmatrix}$$
$$a_2 = \begin{pmatrix}0\\-v\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-v\\-v\end{pmatrix}$$
$$a_7 = \begin{pmatrix}1\\v+1\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-1\\-v-1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}v\\0\end{pmatrix}$$
$$a_4 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_9 = \begin{pmatrix}v\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}v\\0\end{pmatrix}$$
$$a_8 = \begin{pmatrix}v+1\\v+1\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4v - 10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_6	$u^2 - u + 1$
c_2	$u^2 + u + 1$
c_4, c_5, c_9 c_{10}, c_{11}	u^2
c_7, c_8	$(u-1)^2$
c_{12}	$(u+1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_6	$y^2 + y + 1$
c_4, c_5, c_9 c_{10}, c_{11}	y^2
c_7, c_8, c_{12}	$(y-1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -0.500000 + 0.866025I$ $a = 0$ $b = 0.500000 - 0.866025I$	$-1.64493 - 2.02988I$	$-12.00000 + 3.46410I$
$v = -0.500000 - 0.866025I$ $a = 0$ $b = 0.500000 + 0.866025I$	$-1.64493 + 2.02988I$	$-12.00000 - 3.46410I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^3)(u^{71}+34u^{70}+\cdots+6u-1)$
c_2	$((u^2-u+1)^2)(u^2+u+1)(u^{71}-2u^{70}+\cdots-2u-1)$
c_3	$(u^2-u+1)(u^2+u+1)^2(u^{71}+2u^{70}+\cdots-3942u-797)$
c_4, c_5, c_9 c_{10}	$u^2(u^2-2)^2(u^{71}+u^{70}+\cdots-4u-4)$
c_6	$(u^2-u+1)(u^2+u+1)^2(u^{71}-2u^{70}+\cdots-2u-1)$
c_7, c_8	$((u-1)^2)(u+1)^4(u^{71}+3u^{70}+\cdots+19u-7)$
c_{11}	$u^6(u^{71}-15u^{70}+\cdots+3072u-1792)$
c_{12}	$((u-1)^4)(u+1)^2(u^{71}+3u^{70}+\cdots+19u-7)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^2+y+1)^3)(y^{71}+10y^{70}+\cdots+62y-1)$
c_2, c_6	$((y^2+y+1)^3)(y^{71}+34y^{70}+\cdots+6y-1)$
c_3	$((y^2+y+1)^3)(y^{71}-14y^{70}+\cdots+1.87513\times 10^7 y-635209)$
c_4, c_5, c_9 c_{10}	$y^2(y-2)^4(y^{71}-81y^{70}+\cdots+176y-16)$
c_7, c_8, c_{12}	$((y-1)^6)(y^{71}-63y^{70}+\cdots-17y-49)$
c_{11}	$y^6(y^{71}+11y^{70}+\cdots-2719744y-3211264)$