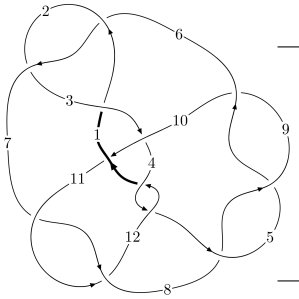
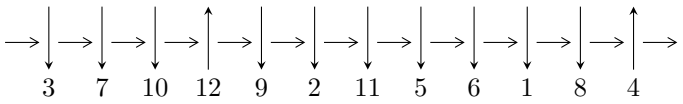
$12a_{0660}$ $(K12a_{0660})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 8.15678 \times 10^{158} u^{106} + 3.46027 \times 10^{159} u^{105} + \cdots + 1.38526 \times 10^{159} b - 1.85181 \times 10^{159},$$
$$8.94370 \times 10^{158} u^{106} + 2.49875 \times 10^{159} u^{105} + \cdots + 1.38526 \times 10^{159} a - 5.17367 \times 10^{158},\ u^{107} + 3u^{106} + \cdots -$$
$$I_2^u = \langle -334u^{25} + 695u^{24} + \cdots + 299b + 422,\ -1077u^{25} + 1225u^{24} + \cdots + 299a - 478,$$
$$u^{26} - 7u^{24} + \cdots + 2u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 133 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. $\boldsymbol{I_1^u = \langle 8.16 \times 10^{158} u^{106} + 3.46 \times 10^{159} u^{105} + \cdots + 1.39 \times 10^{159} b - 1.85 \times 10^{159},\ 8.94 \times 10^{158} u^{106} + 2.50 \times 10^{159} u^{105} + \cdots + 1.39 \times 10^{159} a - 5.17 \times 10^{158},\ u^{107} + 3u^{106} + \cdots - u + 1 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.645634u^{106} - 1.80382u^{105} + \cdots + 0.670204u + 0.373480 \\ -0.588827u^{106} - 2.49792u^{105} + \cdots + 3.21354u + 1.33680 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.502479u^{106} + 2.01864u^{105} + \cdots - 10.0754u + 2.39998 \\ 0.0132447u^{106} - 0.404849u^{105} + \cdots + 3.43356u + 0.0731468 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.676399u^{106} - 1.47429u^{105} + \cdots + 0.764777u + 0.210767 \\ -0.903755u^{106} - 2.97696u^{105} + \cdots + 3.70148u + 0.712057 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.23446u^{106} - 4.30174u^{105} + \cdots + 3.88374u + 1.71028 \\ -0.588827u^{106} - 2.49792u^{105} + \cdots + 3.21354u + 1.33680 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -1.74790u^{106} - 3.18997u^{105} + \cdots + 0.252284u + 1.44174 \\ -1.10312u^{106} - 3.32060u^{105} + \cdots + 3.24796u + 0.488580 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.623400u^{106} + 1.53441u^{105} + \cdots + 3.10548u + 0.978324 \\ 0.207767u^{106} + 1.77731u^{105} + \cdots - 0.844158u - 1.08994 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 3.48966u^{106} + 10.9581u^{105} + \cdots - 1.32391u - 0.827989 \\ -0.527015u^{106} + 0.370912u^{105} + \cdots + 3.18338u - 2.35468 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.99910u^{106} + 5.78442u^{105} + \cdots - 1.90938u - 13.0241$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{107} + 51u^{106} + \cdots + 27u + 1$
c_2, c_6	$u^{107} - 3u^{106} + \cdots - u - 1$
c_3	$u^{107} + 2u^{106} + \cdots + 55540u + 8117$
c_4, c_{12}	$u^{107} + 6u^{106} + \cdots + 63u + 1$
c_5, c_8, c_9	$u^{107} + 3u^{106} + \cdots + 3214u - 319$
c_7, c_{11}	$u^{107} - 3u^{106} + \cdots - 20005u - 18299$
c_{10}	$u^{107} - 13u^{106} + \cdots + 650u - 113$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{107} + 25y^{106} + \cdots - 85y - 1$
c_2, c_6	$y^{107} - 51y^{106} + \cdots + 27y - 1$
c_3	$y^{107} - 22y^{106} + \cdots + 3840497938y - 65885689$
c_4, c_{12}	$y^{107} + 102y^{106} + \cdots + 679y - 1$
c_5, c_8, c_9	$y^{107} - 119y^{106} + \cdots + 4129712y - 101761$
c_7, c_{11}	$y^{107} - 101y^{106} + \cdots + 8587611801y - 334853401$
c_{10}	$y^{107} - 19y^{106} + \cdots + 1683354y - 12769$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.961830+0.332422I$ $a=-0.95342-1.48514I$ $b=-0.213133+0.493321I$	$-3.29063+1.20407I$	0
$u=-0.961830-0.332422I$ $a=-0.95342+1.48514I$ $b=-0.213133-0.493321I$	$-3.29063-1.20407I$	0
$u=\ \ 0.958742+0.341227I$ $a=-1.08709+2.34096I$ $b=-0.217132+0.274273I$	$-7.34857-1.24944I$	0
$u=\ \ 0.958742-0.341227I$ $a=-1.08709-2.34096I$ $b=-0.217132-0.274273I$	$-7.34857+1.24944I$	0
$u=-0.369587+0.955253I$ $a=\ \ 0.870511+0.620617I$ $b=-1.61405-0.28862I$	$-12.0819-11.6140I$	0
$u=-0.369587-0.955253I$ $a=\ \ 0.870511-0.620617I$ $b=-1.61405+0.28862I$	$-12.0819+11.6140I$	0
$u=-0.499372+0.834983I$ $a=-1.168340+0.353127I$ $b=\ \ 1.47972+0.06590I$	$-6.32317+1.20142I$	0
$u=-0.499372-0.834983I$ $a=-1.168340-0.353127I$ $b=\ \ 1.47972-0.06590I$	$-6.32317-1.20142I$	0
$u=-0.946435+0.223421I$ $a=\ \ 0.538397-0.647153I$ $b=\ \ 0.705787+0.351906I$	$-3.77086-1.62099I$	0
$u=-0.946435-0.223421I$ $a=\ \ 0.538397+0.647153I$ $b=\ \ 0.705787-0.351906I$	$-3.77086+1.62099I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.847260 + 0.476918I$ $a = -0.344512 + 0.224684I$ $b = 0.745400 - 0.353078I$	$-0.307193 - 0.490634I$	0
$u = 0.847260 - 0.476918I$ $a = -0.344512 - 0.224684I$ $b = 0.745400 + 0.353078I$	$-0.307193 + 0.490634I$	0
$u = 0.798708 + 0.542944I$ $a = -0.14181 + 1.61061I$ $b = -0.991529 - 0.249020I$	$-0.18748 - 3.71647I$	0
$u = 0.798708 - 0.542944I$ $a = -0.14181 - 1.61061I$ $b = -0.991529 + 0.249020I$	$-0.18748 + 3.71647I$	0
$u = 0.998931 + 0.309324I$ $a = -1.28251 + 1.21264I$ $b = -0.254601 - 1.213830I$	$-7.79059 - 0.96657I$	0
$u = 0.998931 - 0.309324I$ $a = -1.28251 - 1.21264I$ $b = -0.254601 + 1.213830I$	$-7.79059 + 0.96657I$	0
$u = 0.413338 + 0.837059I$ $a = -0.713227 + 1.169820I$ $b = 0.677392 - 0.896334I$	$-4.53636 + 7.22884I$	0
$u = 0.413338 - 0.837059I$ $a = -0.713227 - 1.169820I$ $b = 0.677392 + 0.896334I$	$-4.53636 - 7.22884I$	0
$u = 0.975496 + 0.451189I$ $a = 0.195028 - 0.866105I$ $b = 0.265652 + 0.588887I$	$-2.30476 - 1.54496I$	0
$u = 0.975496 - 0.451189I$ $a = 0.195028 + 0.866105I$ $b = 0.265652 - 0.588887I$	$-2.30476 + 1.54496I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.355666+0.853164I$ $a=-0.200155-0.729502I$ $b=\ \ 0.362854+0.444344I$	$0.88775-3.04504I$	0
$u=-0.355666-0.853164I$ $a=-0.200155+0.729502I$ $b=\ \ 0.362854-0.444344I$	$0.88775+3.04504I$	0
$u=-0.983341+0.443642I$ $a=-0.656672-0.590776I$ $b=\ \ 0.763728+0.511598I$	$-2.44654+4.26744I$	0
$u=-0.983341-0.443642I$ $a=-0.656672+0.590776I$ $b=\ \ 0.763728-0.511598I$	$-2.44654-4.26744I$	0
$u=-0.467684+0.792634I$ $a=-1.24282-0.75290I$ $b=\ \ 1.51899+0.09496I$	$-6.46974-4.55544I$	0
$u=-0.467684-0.792634I$ $a=-1.24282+0.75290I$ $b=\ \ 1.51899-0.09496I$	$-6.46974+4.55544I$	0
$u=\ \ 1.082590+0.029157I$ $a=-0.991798+0.623311I$ $b=-1.62910-0.03464I$	$-11.97000-2.95811I$	0
$u=\ \ 1.082590-0.029157I$ $a=-0.991798-0.623311I$ $b=-1.62910+0.03464I$	$-11.97000+2.95811I$	0
$u=\ \ 0.401674+0.819898I$ $a=-0.755345+0.515225I$ $b=\ \ 1.271110-0.201930I$	$-1.60802+2.19584I$	0
$u=\ \ 0.401674-0.819898I$ $a=-0.755345-0.515225I$ $b=\ \ 1.271110+0.201930I$	$-1.60802-2.19584I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.646248 + 0.881601I$ $a = -0.254328 - 0.603168I$ $b = 0.348185 + 0.570605I$	$-3.33409 - 3.47498I$	0
$u = 0.646248 - 0.881601I$ $a = -0.254328 + 0.603168I$ $b = 0.348185 - 0.570605I$	$-3.33409 + 3.47498I$	0
$u = 0.261399 + 1.062550I$ $a = 0.487280 - 0.288942I$ $b = -1.50275 + 0.10870I$	$-5.36658 + 4.88981I$	0
$u = 0.261399 - 1.062550I$ $a = 0.487280 + 0.288942I$ $b = -1.50275 - 0.10870I$	$-5.36658 - 4.88981I$	0
$u = 1.023000 + 0.428534I$ $a = 2.53956 - 0.97539I$ $b = 1.59921 + 0.09408I$	$-13.7231 - 6.2790I$	0
$u = 1.023000 - 0.428534I$ $a = 2.53956 + 0.97539I$ $b = 1.59921 - 0.09408I$	$-13.7231 + 6.2790I$	0
$u = -0.589912 + 0.656621I$ $a = 0.437981 + 1.143260I$ $b = -0.087007 - 0.593363I$	$2.54220 + 0.64997I$	0
$u = -0.589912 - 0.656621I$ $a = 0.437981 - 1.143260I$ $b = -0.087007 + 0.593363I$	$2.54220 - 0.64997I$	0
$u = -1.043800 + 0.426405I$ $a = 1.20392 + 0.88892I$ $b = 1.60785 + 0.07237I$	$-9.62067 + 2.93444I$	0
$u = -1.043800 - 0.426405I$ $a = 1.20392 - 0.88892I$ $b = 1.60785 - 0.07237I$	$-9.62067 - 2.93444I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.12940$ $a=-1.00887$ $b=-1.42458$	-7.23387	0
$u=-1.035950+0.471098I$ $a=\ \ 0.99679+3.24691I$ $b=\ \ 1.50492+0.07277I$	$-13.41210+0.09296I$	0
$u=-1.035950-0.471098I$ $a=\ \ 0.99679-3.24691I$ $b=\ \ 1.50492-0.07277I$	$-13.41210-0.09296I$	0
$u=\ \ 1.059380+0.421034I$ $a=\ \ 0.192519-0.909579I$ $b=\ \ 1.79206-0.30617I$	$-14.4279+0.5275I$	0
$u=\ \ 1.059380-0.421034I$ $a=\ \ 0.192519+0.909579I$ $b=\ \ 1.79206+0.30617I$	$-14.4279-0.5275I$	0
$u=\ \ 1.053830+0.463544I$ $a=\ \ 0.59344-2.50820I$ $b=\ \ 1.51988+0.16655I$	$-9.35195-3.71564I$	0
$u=\ \ 1.053830-0.463544I$ $a=\ \ 0.59344+2.50820I$ $b=\ \ 1.51988-0.16655I$	$-9.35195+3.71564I$	0
$u=-1.027130+0.527139I$ $a=-1.39492-0.38480I$ $b=-0.661152+0.306944I$	$-5.95960+4.75876I$	0
$u=-1.027130-0.527139I$ $a=-1.39492+0.38480I$ $b=-0.661152-0.306944I$	$-5.95960-4.75876I$	0
$u=-1.001470+0.576910I$ $a=\ \ 0.512781+1.161960I$ $b=\ \ 0.239029-0.663644I$	$1.30721+4.16361I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.001470-0.576910I$ $a=\ 0.512781-1.161960I$ $b=\ 0.239029+0.663644I$	$1.30721-4.16361I$	0
$u=-1.069050+0.460268I$ $a=\ 0.32136+2.22693I$ $b=\ 1.67047-0.46711I$	$-14.1458+7.4015I$	0
$u=-1.069050-0.460268I$ $a=\ 0.32136-2.22693I$ $b=\ 1.67047+0.46711I$	$-14.1458-7.4015I$	0
$u=-0.752673+0.357367I$ $a=-0.82907-2.31432I$ $b=-0.962388+0.289012I$	$-1.52828-0.85653I$	$-15.4191-2.9581I$
$u=-0.752673-0.357367I$ $a=-0.82907+2.31432I$ $b=-0.962388-0.289012I$	$-1.52828+0.85653I$	$-15.4191+2.9581I$
$u=\ 1.035010+0.557185I$ $a=\ 0.160485-0.131907I$ $b=-0.630787+0.508665I$	$-1.66121-4.79673I$	0
$u=\ 1.035010-0.557185I$ $a=\ 0.160485+0.131907I$ $b=-0.630787-0.508665I$	$-1.66121+4.79673I$	0
$u=-1.178020+0.076352I$ $a=-0.015667-0.228494I$ $b=-0.811495-0.658408I$	$-10.09900-4.81161I$	0
$u=-1.178020-0.076352I$ $a=-0.015667+0.228494I$ $b=-0.811495+0.658408I$	$-10.09900+4.81161I$	0
$u=\ 0.544622+0.609128I$ $a=\ 0.012491-0.923495I$ $b=\ 0.734322+0.303158I$	$-0.166974+0.153852I$	$-8.00000+2.06306I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.544622 - 0.609128I$ $a = 0.012491 + 0.923495I$ $b = 0.734322 - 0.303158I$	$-0.166974 - 0.153852I$	$-8.00000 - 2.06306I$
$u = 1.042950 + 0.564382I$ $a = 0.30084 - 1.66219I$ $b = 0.444295 + 0.476539I$	$-1.60574 - 7.73159I$	0
$u = 1.042950 - 0.564382I$ $a = 0.30084 + 1.66219I$ $b = 0.444295 - 0.476539I$	$-1.60574 + 7.73159I$	0
$u = -1.063710 + 0.548200I$ $a = 0.932445 + 0.402901I$ $b = -0.650175 - 1.199090I$	$-6.09234 + 5.54333I$	0
$u = -1.063710 - 0.548200I$ $a = 0.932445 - 0.402901I$ $b = -0.650175 + 1.199090I$	$-6.09234 - 5.54333I$	0
$u = 0.482974 + 0.625314I$ $a = 0.80091 - 1.39267I$ $b = -0.390008 + 0.344012I$	$0.02557 + 3.02324I$	$-6.28635 - 4.37518I$
$u = 0.482974 - 0.625314I$ $a = 0.80091 + 1.39267I$ $b = -0.390008 - 0.344012I$	$0.02557 - 3.02324I$	$-6.28635 + 4.37518I$
$u = -0.428679 + 0.620294I$ $a = 0.26578 + 1.93424I$ $b = 0.638474 - 1.006270I$	$-4.25310 - 0.91402I$	$-12.05109 + 0.86644I$
$u = -0.428679 - 0.620294I$ $a = 0.26578 - 1.93424I$ $b = 0.638474 + 1.006270I$	$-4.25310 + 0.91402I$	$-12.05109 - 0.86644I$
$u = -1.086820 + 0.616697I$ $a = 0.05129 - 2.46156I$ $b = -1.53726 + 0.13189I$	$-8.32326 + 9.85252I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.086820-0.616697I$ $a=\ \ 0.05129+2.46156I$ $b=-1.53726-0.13189I$	$-8.32326-9.85252I$	0
$u=\ \ 1.110860+0.607119I$ $a=-0.29657+1.87350I$ $b=-1.359380-0.262195I$	$-3.71417-7.50040I$	0
$u=\ \ 1.110860-0.607119I$ $a=-0.29657-1.87350I$ $b=-1.359380+0.262195I$	$-3.71417+7.50040I$	0
$u=\ \ 1.120690+0.617015I$ $a=-0.70783+1.44475I$ $b=-0.757046-0.975658I$	$-6.6596-12.6316I$	0
$u=\ \ 1.120690-0.617015I$ $a=-0.70783-1.44475I$ $b=-0.757046+0.975658I$	$-6.6596+12.6316I$	0
$u=\ \ 1.27963$ $a=-0.0992902$ $b=-0.553045$	-5.05733	0
$u=\ \ 0.701738+0.120348I$ $a=-1.46299-1.49108I$ $b=-1.64323+0.14164I$	$-12.19130+3.25713I$	$-15.3274-4.1847I$
$u=\ \ 0.701738-0.120348I$ $a=-1.46299+1.49108I$ $b=-1.64323-0.14164I$	$-12.19130-3.25713I$	$-15.3274+4.1847I$
$u=-1.134770+0.612321I$ $a=-0.447512-1.033430I$ $b=-0.511287+0.526545I$	$-1.41429+8.44777I$	0
$u=-1.134770-0.612321I$ $a=-0.447512+1.033430I$ $b=-0.511287-0.526545I$	$-1.41429-8.44777I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.126400+0.645504I$ $a=\ \ 0.002752-1.350330I$ $b=-1.49779+0.18754I$	$-8.21556+4.40368I$	0
$u=-1.126400-0.645504I$ $a=\ \ 0.002752+1.350330I$ $b=-1.49779-0.18754I$	$-8.21556-4.40368I$	0
$u=-0.420939+0.556724I$ $a=\ \ 0.750965-0.613422I$ $b=\ \ 0.658200+0.559164I$	$-4.26943-0.42399I$	$-12.37722+1.41628I$
$u=-0.420939-0.556724I$ $a=\ \ 0.750965+0.613422I$ $b=\ \ 0.658200-0.559164I$	$-4.26943+0.42399I$	$-12.37722-1.41628I$
$u=-0.662497$ $a=-1.19741$ $b=-1.55444$	-7.71707	-7.81120
$u=-1.178940+0.641156I$ $a=\ \ 0.34912+1.97318I$ $b=\ \ 1.64908-0.30821I$	$-14.5604+17.4121I$	0
$u=-1.178940-0.641156I$ $a=\ \ 0.34912-1.97318I$ $b=\ \ 1.64908+0.30821I$	$-14.5604-17.4121I$	0
$u=\ \ 1.342830+0.113004I$ $a=\ \ 0.901474-0.035474I$ $b=\ \ 1.62538-0.20955I$	$-18.2104+8.1395I$	0
$u=\ \ 1.342830-0.113004I$ $a=\ \ 0.901474+0.035474I$ $b=\ \ 1.62538+0.20955I$	$-18.2104-8.1395I$	0
$u=\ \ 1.174610+0.718450I$ $a=\ \ 0.292584+0.406354I$ $b=-0.361205+0.204690I$	$-4.87840-2.84883I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.174610 - 0.718450I$ $a = 0.292584 - 0.406354I$ $b = -0.361205 - 0.204690I$	$-4.87840 + 2.84883I$	0
$u = 1.229600 + 0.634165I$ $a = 0.45790 - 1.57642I$ $b = 1.54743 + 0.15323I$	$-8.33840 - 10.88000I$	0
$u = 1.229600 - 0.634165I$ $a = 0.45790 + 1.57642I$ $b = 1.54743 - 0.15323I$	$-8.33840 + 10.88000I$	0
$u = -0.82387 + 1.16076I$ $a = 0.467673 - 0.513641I$ $b = -1.48599 + 0.13947I$	$-9.35763 + 5.83766I$	0
$u = -0.82387 - 1.16076I$ $a = 0.467673 + 0.513641I$ $b = -1.48599 - 0.13947I$	$-9.35763 - 5.83766I$	0
$u = -0.456936 + 0.297374I$ $a = 1.94886 + 2.09058I$ $b = -1.49236 + 0.19573I$	$-11.67510 + 3.61819I$	$-15.3245 - 2.0364I$
$u = -0.456936 - 0.297374I$ $a = 1.94886 - 2.09058I$ $b = -1.49236 - 0.19573I$	$-11.67510 - 3.61819I$	$-15.3245 + 2.0364I$
$u = 0.275947 + 0.468834I$ $a = 1.49462 + 0.22906I$ $b = -0.306062 + 0.073717I$	$-0.41942 - 1.87061I$	$-2.28257 + 2.16523I$
$u = 0.275947 - 0.468834I$ $a = 1.49462 - 0.22906I$ $b = -0.306062 - 0.073717I$	$-0.41942 + 1.87061I$	$-2.28257 - 2.16523I$
$u = -1.55845$ $a = 0.737300$ $b = 1.54505$	-12.1521	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.35218+0.78104I$ $a=\ 0.117163+0.891623I$ $b=\ 1.51892+0.04503I$	$-11.35640+2.05729I$	0
$u=-1.35218-0.78104I$ $a=\ 0.117163-0.891623I$ $b=\ 1.51892-0.04503I$	$-11.35640-2.05729I$	0
$u=\ 0.302311+0.264665I$ $a=\ 2.48177-1.20861I$ $b=-1.47079+0.04091I$	$-7.33661+0.04340I$	$-11.42829+0.98615I$
$u=\ 0.302311-0.264665I$ $a=\ 2.48177+1.20861I$ $b=-1.47079-0.04091I$	$-7.33661-0.04340I$	$-11.42829-0.98615I$
$u=-0.177377+0.359865I$ $a=\ 3.30258+0.98833I$ $b=-1.59367-0.30072I$	$-11.89520-3.67260I$	$-13.94110+2.10078I$
$u=-0.177377-0.359865I$ $a=\ 3.30258-0.98833I$ $b=-1.59367+0.30072I$	$-11.89520+3.67260I$	$-13.94110-2.10078I$
$u=\ 0.366309$ $a=\ 0.499006$ $b=\ 0.473068$	-0.723312	-13.3650

II. $I_2^u = \langle -334u^{25} + 695u^{24} + \cdots + 299b + 422,\ -1077u^{25} + 1225u^{24} + \cdots + 299a - 478,\ u^{26} - 7u^{24} + \cdots + 2u + 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 3.60201u^{25} - 4.09699u^{24} + \cdots + 4.92977u + 1.59866 \\ 1.11706u^{25} - 2.32441u^{24} + \cdots - 1.09699u - 1.41137 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -8.30435u^{25} + 6.04348u^{24} + \cdots - 13.3478u - 13.1304 \\ -0.297659u^{25} + 1.05351u^{24} + \cdots - 2.58194u - 0.468227 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 4.48161u^{25} - 6.27759u^{24} + \cdots + 7.14381u + 2.67893 \\ 1.91304u^{25} - 3.13043u^{24} + \cdots + 1.04348u + 0.391304 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 4.71906u^{25} - 6.42140u^{24} + \cdots + 3.83278u + 0.187291 \\ 1.11706u^{25} - 2.32441u^{24} + \cdots - 1.09699u - 1.41137 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -3.48161u^{25} + 5.27759u^{24} + \cdots - 6.14381u - 1.67893 \\ -5.17057u^{25} + 5.24415u^{24} + \cdots - 7.03010u - 6.88629 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -3.51171u^{25} + 6.73244u^{24} + \cdots - 4.09030u + 0.341137 \\ -1.11706u^{25} + 2.32441u^{24} + \cdots + 2.09699u + 3.41137 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -7.14716u^{25} + 9.77926u^{24} + \cdots - 1.84950u - 1.56856 \\ 1.95318u^{25} - 1.07023u^{24} + \cdots + 2.63880u + 3.36455 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{165}{299}u^{25} + \frac{995}{299}u^{24} + \cdots - \frac{2785}{299}u - \frac{6987}{299}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{26} - 14u^{25} + \cdots - 10u + 1$
c_2	$u^{26} - 7u^{24} + \cdots - 2u + 1$
c_3	$u^{26} - u^{25} + \cdots + 5u + 1$
c_4	$u^{26} + u^{25} + \cdots - 2u - 1$
c_5	$u^{26} + 2u^{25} + \cdots + 3u + 1$
c_6	$u^{26} - 7u^{24} + \cdots + 2u + 1$
c_7	$u^{26} + 4u^{25} + \cdots - 10u^2 + 1$
c_8, c_9	$u^{26} - 2u^{25} + \cdots - 3u + 1$
c_{10}	$u^{26} - 4u^{25} + \cdots + u + 1$
c_{11}	$u^{26} - 4u^{25} + \cdots - 10u^2 + 1$
c_{12}	$u^{26} - u^{25} + \cdots + 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{26} + 10y^{25} + \cdots + 38y + 1$
c_2, c_6	$y^{26} - 14y^{25} + \cdots - 10y + 1$
c_3	$y^{26} - 5y^{25} + \cdots - 9y + 1$
c_4, c_{12}	$y^{26} + 27y^{25} + \cdots - 2y + 1$
c_5, c_8, c_9	$y^{26} - 30y^{25} + \cdots - 3y + 1$
c_7, c_{11}	$y^{26} - 28y^{25} + \cdots - 20y + 1$
c_{10}	$y^{26} - 6y^{25} + \cdots - 9y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.891075 + 0.380566I$ $a = -1.70564 + 2.03339I$ $b = -0.052101 - 0.783689I$	$-6.52057 - 1.58619I$	$-11.13878 + 4.70789I$
$u = \quad 0.891075 - 0.380566I$ $a = -1.70564 - 2.03339I$ $b = -0.052101 + 0.783689I$	$-6.52057 + 1.58619I$	$-11.13878 - 4.70789I$
$u = -0.972838 + 0.382323I$ $a = \quad 1.95903 + 1.93712I$ $b = \quad 1.64009 - 0.17783I$	$-13.09300 + 5.33772I$	$-15.9075 - 3.0735I$
$u = -0.972838 - 0.382323I$ $a = \quad 1.95903 - 1.93712I$ $b = \quad 1.64009 + 0.17783I$	$-13.09300 - 5.33772I$	$-15.9075 + 3.0735I$
$u = -1.026340 + 0.321789I$ $a = -0.525160 - 1.191030I$ $b = -0.265340 + 0.316771I$	$-3.72230 + 0.86010I$	$-19.0329 + 0.9012I$
$u = -1.026340 - 0.321789I$ $a = -0.525160 + 1.191030I$ $b = -0.265340 - 0.316771I$	$-3.72230 - 0.86010I$	$-19.0329 - 0.9012I$
$u = -0.313858 + 0.834147I$ $a = -0.599355 - 0.634863I$ $b = \quad 1.164880 + 0.112105I$	$-2.33379 - 2.84492I$	$-13.08240 + 4.43582I$
$u = -0.313858 - 0.834147I$ $a = -0.599355 + 0.634863I$ $b = \quad 1.164880 - 0.112105I$	$-2.33379 + 2.84492I$	$-13.08240 - 4.43582I$
$u = -0.824195 + 0.330430I$ $a = \quad 0.204618 + 0.919108I$ $b = -1.61295 - 0.22747I$	$-12.48810 - 2.34513I$	$-17.3401 - 2.9451I$
$u = -0.824195 - 0.330430I$ $a = \quad 0.204618 - 0.919108I$ $b = -1.61295 + 0.22747I$	$-12.48810 + 2.34513I$	$-17.3401 + 2.9451I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.852732$ $a = -0.0867455$ $b = -1.49266$	-8.40870	-20.9900
$u = \ 1.042500 + 0.521454I$ $a = \ 0.224651 - 0.424836I$ $b = -0.647137 + 0.434979I$	$-2.50208 - 5.68648I$	$-14.8169 + 7.7156I$
$u = \ 1.042500 - 0.521454I$ $a = \ 0.224651 + 0.424836I$ $b = -0.647137 - 0.434979I$	$-2.50208 + 5.68648I$	$-14.8169 - 7.7156I$
$u = \ 1.19669$ $a = -0.710915$ $b = -1.34206$	-8.04833	-21.1050
$u = -1.019820 + 0.702803I$ $a = \ 0.1291110 - 0.0109067I$ $b = -0.169283 - 0.489484I$	$-4.43083 + 3.01433I$	$-10.68304 - 6.30341I$
$u = -1.019820 - 0.702803I$ $a = \ 0.1291110 + 0.0109067I$ $b = -0.169283 + 0.489484I$	$-4.43083 - 3.01433I$	$-10.68304 + 6.30341I$
$u = -1.128990 + 0.591776I$ $a = -0.27915 - 1.85080I$ $b = -1.223780 + 0.214071I$	$-4.70056 + 8.07811I$	$-15.9741 - 7.2885I$
$u = -1.128990 - 0.591776I$ $a = -0.27915 + 1.85080I$ $b = -1.223780 - 0.214071I$	$-4.70056 - 8.07811I$	$-15.9741 + 7.2885I$
$u = \ 0.530807 + 0.455633I$ $a = \ 0.28846 - 1.86461I$ $b = \ 0.786418 + 0.292203I$	$-0.88641 + 1.48655I$	$-9.46143 - 3.25797I$
$u = \ 0.530807 - 0.455633I$ $a = \ 0.28846 + 1.86461I$ $b = \ 0.786418 - 0.292203I$	$-0.88641 - 1.48655I$	$-9.46143 + 3.25797I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.220580 + 0.530476I$ $a = 0.592322 - 1.173540I$ $b = 1.55624 - 0.04997I$	$-11.22610 - 1.27567I$	$-16.6039 - 0.0782I$
$u = 1.220580 - 0.530476I$ $a = 0.592322 + 1.173540I$ $b = 1.55624 + 0.04997I$	$-11.22610 + 1.27567I$	$-16.6039 + 0.0782I$
$u = 0.937979 + 0.953940I$ $a = 0.491337 + 0.666524I$ $b = -1.47254 - 0.15676I$	$-9.39283 - 5.41019I$	$-18.4634 - 0.9639I$
$u = 0.937979 - 0.953940I$ $a = 0.491337 - 0.666524I$ $b = -1.47254 + 0.15676I$	$-9.39283 + 5.41019I$	$-18.4634 + 0.9639I$
$u = -0.361599 + 0.346719I$ $a = -1.88139 + 1.04060I$ $b = 0.712858 - 0.024016I$	$-1.07670 + 2.06839I$	$-13.9483 - 4.7417I$
$u = -0.361599 - 0.346719I$ $a = -1.88139 - 1.04060I$ $b = 0.712858 + 0.024016I$	$-1.07670 - 2.06839I$	$-13.9483 + 4.7417I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{26}-14u^{25}+\cdots-10u+1)(u^{107}+51u^{106}+\cdots+27u+1)$
c_2	$(u^{26}-7u^{24}+\cdots-2u+1)(u^{107}-3u^{106}+\cdots-u-1)$
c_3	$(u^{26}-u^{25}+\cdots+5u+1)(u^{107}+2u^{106}+\cdots+55540u+8117)$
c_4	$(u^{26}+u^{25}+\cdots-2u-1)(u^{107}+6u^{106}+\cdots+63u+1)$
c_5	$(u^{26}+2u^{25}+\cdots+3u+1)(u^{107}+3u^{106}+\cdots+3214u-319)$
c_6	$(u^{26}-7u^{24}+\cdots+2u+1)(u^{107}-3u^{106}+\cdots-u-1)$
c_7	$(u^{26}+4u^{25}+\cdots-10u^2+1)(u^{107}-3u^{106}+\cdots-20005u-18299)$
c_8, c_9	$(u^{26}-2u^{25}+\cdots-3u+1)(u^{107}+3u^{106}+\cdots+3214u-319)$
c_{10}	$(u^{26}-4u^{25}+\cdots+u+1)(u^{107}-13u^{106}+\cdots+650u-113)$
c_{11}	$(u^{26}-4u^{25}+\cdots-10u^2+1)(u^{107}-3u^{106}+\cdots-20005u-18299)$
c_{12}	$(u^{26}-u^{25}+\cdots+2u-1)(u^{107}+6u^{106}+\cdots+63u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{26}+10y^{25}+\cdots+38y+1)(y^{107}+25y^{106}+\cdots-85y-1)$
c_2, c_6	$(y^{26}-14y^{25}+\cdots-10y+1)(y^{107}-51y^{106}+\cdots+27y-1)$
c_3	$(y^{26}-5y^{25}+\cdots-9y+1)$ $\cdot(y^{107}-22y^{106}+\cdots+3840497938y-65885689)$
c_4, c_{12}	$(y^{26}+27y^{25}+\cdots-2y+1)(y^{107}+102y^{106}+\cdots+679y-1)$
c_5, c_8, c_9	$(y^{26}-30y^{25}+\cdots-3y+1)$ $\cdot(y^{107}-119y^{106}+\cdots+4129712y-101761)$
c_7, c_{11}	$(y^{26}-28y^{25}+\cdots-20y+1)$ $\cdot(y^{107}-101y^{106}+\cdots+8587611801y-334853401)$
c_{10}	$(y^{26}-6y^{25}+\cdots-9y+1)(y^{107}-19y^{106}+\cdots+1683354y-12769)$