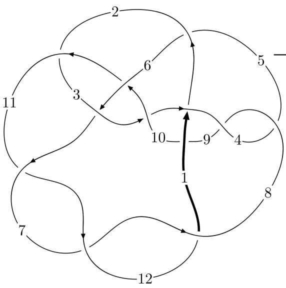
$12n_{0883}$ ($K12n_{0883}$)



A knot diagram[1]

Linearized knot diagam

$$\rightarrow \underset{4}{\downarrow} \rightarrow \underset{11}{\downarrow} \rightarrow \underset{10}{\uparrow} \rightarrow \underset{8}{\uparrow} \rightarrow \underset{2}{\downarrow} \rightarrow \underset{3}{\uparrow} \rightarrow \underset{12}{\downarrow} \rightarrow \underset{4}{\uparrow} \rightarrow \underset{1}{\downarrow} \rightarrow \underset{6}{\uparrow} \rightarrow \underset{7}{\downarrow} \rightarrow \underset{8}{\downarrow} \rightarrow$$

Solving Sequence

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

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

$$\begin{aligned}
I^u_1 = \langle & 1.59510 \times 10^{260} u^{68} - 7.42718 \times 10^{260} u^{67} + \cdots + 1.62945 \times 10^{263} b + 1.10045 \times 10^{264}, \\
& 2.38672 \times 10^{264} u^{68} - 1.77424 \times 10^{264} u^{67} + \cdots + 2.65600 \times 10^{265} a + 4.40019 \times 10^{267}, \\
& u^{69} - u^{68} + \cdots + 5598u - 326 \rangle \\
I^u_2 = \langle & 4.71127 \times 10^{15} u^{19} - 6.47791 \times 10^{15} u^{18} + \cdots + 4.46458 \times 10^{16} b + 2.86340 \times 10^{16}, \\
& 2.26761 \times 10^{16} u^{19} - 5.05266 \times 10^{16} u^{18} + \cdots + 8.92916 \times 10^{16} a - 2.11962 \times 10^{17},\ u^{20} - 2u^{19} + \cdots - 2u + 2
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 89 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. $\boldsymbol{I_1^u = \langle 1.60 \times 10^{260} u^{68} - 7.43 \times 10^{260} u^{67} + \cdots + 1.63 \times 10^{263} b + 1.10 \times 10^{264},\ 2.39 \times 10^{264} u^{68} - 1.77 \times 10^{264} u^{67} + \cdots + 2.66 \times 10^{265} a + 4.40 \times 10^{267},\ u^{69} - u^{68} + \cdots + 5598u - 326 \rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.0898616u^{68} + 0.0668011u^{67} + \cdots + 1857.03u - 165.670 \\ -0.000978922u^{68} + 0.00455810u^{67} + \cdots + 61.7443u - 6.75351 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.119212u^{68} - 0.0882484u^{67} + \cdots - 2414.13u + 212.151 \\ -0.0136947u^{68} + 0.00153908u^{67} + \cdots + 13.6473u + 5.88030 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.0908405u^{68} + 0.0713592u^{67} + \cdots + 1918.77u - 172.423 \\ -0.000978922u^{68} + 0.00455810u^{67} + \cdots + 61.7443u - 6.75351 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0359205u^{68} + 0.0140602u^{67} + \cdots + 385.225u - 23.0840 \\ -0.0189792u^{68} + 0.0123122u^{67} + \cdots + 377.671u - 33.9102 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.0963752u^{68} + 0.0735527u^{67} + \cdots + 1908.00u - 163.170 \\ -0.00161754u^{68} + 0.00623717u^{67} + \cdots + 185.450u - 20.1627 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0908405u^{68} + 0.0713592u^{67} + \cdots + 1918.77u - 172.423 \\ 0.00621827u^{68} + 0.00190635u^{67} + \cdots - 17.6980u - 0.402606 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.0373943u^{68} - 0.0234926u^{67} + \cdots - 647.218u + 50.3563 \\ -0.00842474u^{68} - 0.00858578u^{67} + \cdots - 196.363u + 22.7404 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0936309u^{68} + 0.100845u^{67} + \cdots + 2668.46u - 251.034 \\ -0.00234625u^{68} - 0.00660391u^{67} + \cdots - 141.177u + 11.7322 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0737369u^{68} - 0.0552753u^{67} + \cdots - 1897.44u + 179.175$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{69} + 3u^{68} + \cdots - 7855u - 844$
c_2	$u^{69} + 4u^{68} + \cdots - 447u - 94$
c_3	$u^{69} + 22u^{67} + \cdots + 4528u + 2690$
c_4, c_8	$u^{69} + u^{68} + \cdots + 5598u + 326$
c_5	$u^{69} + 2u^{67} + \cdots - 96u - 10$
c_6	$u^{69} - 5u^{68} + \cdots - 1042u - 242$
c_7, c_{11}, c_{12}	$u^{69} - u^{68} + \cdots + 8u + 2$
c_9	$u^{69} + 37u^{67} + \cdots - 12439u + 1286$
c_{10}	$u^{69} + 2u^{68} + \cdots + u + 2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{69} + 61y^{68} + \cdots - 33395831y - 712336$
c_2	$y^{69} - 10y^{68} + \cdots + 187213y - 8836$
c_3	$y^{69} + 44y^{68} + \cdots - 160249076y - 7236100$
c_4, c_8	$y^{69} - 71y^{68} + \cdots + 10709628y - 106276$
c_5	$y^{69} + 4y^{68} + \cdots - 111724y - 100$
c_6	$y^{69} + 29y^{68} + \cdots - 1680780y - 58564$
c_7, c_{11}, c_{12}	$y^{69} - 69y^{68} + \cdots - 1868y - 4$
c_9	$y^{69} + 74y^{68} + \cdots - 48598167y - 1653796$
c_{10}	$y^{69} + 70y^{67} + \cdots - 99y - 4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.937388 + 0.169929I$ $a = 0.043478 - 0.742272I$ $b = -1.43395 + 0.18421I$	$-7.84748 - 8.49945I$	0
$u = -0.937388 - 0.169929I$ $a = 0.043478 + 0.742272I$ $b = -1.43395 - 0.18421I$	$-7.84748 + 8.49945I$	0
$u = -0.900734 + 0.543791I$ $a = -0.880354 + 0.906296I$ $b = -0.10421 - 1.57726I$	$-0.86538 + 2.81593I$	0
$u = -0.900734 - 0.543791I$ $a = -0.880354 - 0.906296I$ $b = -0.10421 + 1.57726I$	$-0.86538 - 2.81593I$	0
$u = 0.901600 + 0.002839I$ $a = -0.299924 - 1.023530I$ $b = -1.241240 + 0.577767I$	$-6.61914 + 0.01529I$	0
$u = 0.901600 - 0.002839I$ $a = -0.299924 + 1.023530I$ $b = -1.241240 - 0.577767I$	$-6.61914 - 0.01529I$	0
$u = -1.098090 + 0.089462I$ $a = -0.231231 + 0.492442I$ $b = 1.47104 - 0.43938I$	$-6.40650 + 1.70687I$	0
$u = -1.098090 - 0.089462I$ $a = -0.231231 - 0.492442I$ $b = 1.47104 + 0.43938I$	$-6.40650 - 1.70687I$	0
$u = 0.891922$ $a = -1.33838$ $b = -0.319994$	-3.90346	0
$u = 1.084820 + 0.583325I$ $a = 0.429051 + 0.576072I$ $b = 0.30747 - 1.40594I$	$-1.38126 + 4.86406I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.084820 - 0.583325I$ $a = 0.429051 - 0.576072I$ $b = 0.30747 + 1.40594I$	$-1.38126 - 4.86406I$	0
$u = 0.122701 + 0.739942I$ $a = -0.892972 + 0.209852I$ $b = 0.443092 + 0.333001I$	$-1.26816 - 1.18876I$	$-2.82487 + 5.99212I$
$u = 0.122701 - 0.739942I$ $a = -0.892972 - 0.209852I$ $b = 0.443092 - 0.333001I$	$-1.26816 + 1.18876I$	$-2.82487 - 5.99212I$
$u = -0.521137 + 0.477077I$ $a = 1.87070 + 2.12252I$ $b = -0.053829 - 0.734075I$	$-9.29987 + 6.46112I$	$-3.09471 - 4.46072I$
$u = -0.521137 - 0.477077I$ $a = 1.87070 - 2.12252I$ $b = -0.053829 + 0.734075I$	$-9.29987 - 6.46112I$	$-3.09471 + 4.46072I$
$u = 0.616847 + 0.305370I$ $a = 0.386621 - 0.542148I$ $b = 1.270370 - 0.229148I$	$-5.74954 + 1.06735I$	$-12.5664 - 6.4993I$
$u = 0.616847 - 0.305370I$ $a = 0.386621 + 0.542148I$ $b = 1.270370 + 0.229148I$	$-5.74954 - 1.06735I$	$-12.5664 + 6.4993I$
$u = 1.315000 + 0.102944I$ $a = -0.278028 + 1.229770I$ $b = 0.39050 - 1.53129I$	$2.43759 + 4.36021I$	0
$u = 1.315000 - 0.102944I$ $a = -0.278028 - 1.229770I$ $b = 0.39050 + 1.53129I$	$2.43759 - 4.36021I$	0
$u = 0.294280 + 0.543366I$ $a = 1.01357 - 1.53056I$ $b = 0.314876 - 0.875991I$	$-8.76029 + 1.21269I$	$-5.57587 - 5.50908I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.294280 - 0.543366I$ $a = 1.01357 + 1.53056I$ $b = 0.314876 + 0.875991I$	$-8.76029 - 1.21269I$	$-5.57587 + 5.50908I$
$u = -0.456789 + 0.317551I$ $a = -0.559476 + 0.192992I$ $b = -0.115002 + 0.434041I$	$0.98160 - 1.05730I$	$2.65855 + 2.72887I$
$u = -0.456789 - 0.317551I$ $a = -0.559476 - 0.192992I$ $b = -0.115002 - 0.434041I$	$0.98160 + 1.05730I$	$2.65855 - 2.72887I$
$u = 0.27792 + 1.43387I$ $a = 0.184504 - 0.104863I$ $b = 0.169303 - 0.837058I$	$-8.67747 + 0.45721I$	0
$u = 0.27792 - 1.43387I$ $a = 0.184504 + 0.104863I$ $b = 0.169303 + 0.837058I$	$-8.67747 - 0.45721I$	0
$u = -0.14990 + 1.48458I$ $a = 0.315672 + 0.178950I$ $b = 0.085797 - 0.238221I$	$-3.99806 - 3.95956I$	0
$u = -0.14990 - 1.48458I$ $a = 0.315672 - 0.178950I$ $b = 0.085797 + 0.238221I$	$-3.99806 + 3.95956I$	0
$u = 0.349929 + 0.366099I$ $a = -1.39394 + 0.39447I$ $b = 0.190178 + 0.220324I$	$-1.21862 - 0.72825I$	$-4.93688 + 0.50068I$
$u = 0.349929 - 0.366099I$ $a = -1.39394 - 0.39447I$ $b = 0.190178 - 0.220324I$	$-1.21862 + 0.72825I$	$-4.93688 - 0.50068I$
$u = 0.402832 + 0.287203I$ $a = -0.958411 - 0.330421I$ $b = 1.015600 + 0.448453I$	$-1.86231 - 1.13742I$	$2.46556 - 4.13256I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.402832 - 0.287203I$ $a = -0.958411 + 0.330421I$ $b = 1.015600 - 0.448453I$	$-1.86231 + 1.13742I$	$2.46556 + 4.13256I$
$u = -1.37941 + 0.63523I$ $a = 0.495306 - 1.088720I$ $b = 0.31114 + 1.68003I$	$1.20843 - 8.06995I$	0
$u = -1.37941 - 0.63523I$ $a = 0.495306 + 1.088720I$ $b = 0.31114 - 1.68003I$	$1.20843 + 8.06995I$	0
$u = -1.54862 + 0.18920I$ $a = 0.531241 - 0.765048I$ $b = -0.02146 + 1.56991I$	$2.62752 + 3.54439I$	0
$u = -1.54862 - 0.18920I$ $a = 0.531241 + 0.765048I$ $b = -0.02146 - 1.56991I$	$2.62752 - 3.54439I$	0
$u = 0.426848 + 0.055916I$ $a = 1.94065 - 0.16496I$ $b = 0.013936 + 0.901571I$	$-1.20775 - 4.21129I$	$-4.14353 + 6.76110I$
$u = 0.426848 - 0.055916I$ $a = 1.94065 + 0.16496I$ $b = 0.013936 - 0.901571I$	$-1.20775 + 4.21129I$	$-4.14353 - 6.76110I$
$u = -1.58578 + 0.06116I$ $a = 0.216735 + 0.784957I$ $b = -0.28573 - 1.56489I$	$2.33854 - 1.02618I$	0
$u = -1.58578 - 0.06116I$ $a = 0.216735 - 0.784957I$ $b = -0.28573 + 1.56489I$	$2.33854 + 1.02618I$	0
$u = -0.316446 + 0.256770I$ $a = -3.53853 - 1.87963I$ $b = 0.422485 - 0.553073I$	$-9.07448 + 1.51500I$	$2.38611 + 3.76927I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.316446 - 0.256770I$ $a = -3.53853 + 1.87963I$ $b = 0.422485 + 0.553073I$	$-9.07448 - 1.51500I$	$2.38611 - 3.76927I$
$u = -1.53034 + 0.45332I$ $a = 0.051803 - 1.168240I$ $b = 0.76970 + 1.51354I$	$-2.82820 - 6.39077I$	0
$u = -1.53034 - 0.45332I$ $a = 0.051803 + 1.168240I$ $b = 0.76970 - 1.51354I$	$-2.82820 + 6.39077I$	0
$u = 1.59807 + 0.28399I$ $a = 0.144623 + 1.087600I$ $b = 0.00268 - 1.61595I$	$7.27344 + 4.05568I$	0
$u = 1.59807 - 0.28399I$ $a = 0.144623 - 1.087600I$ $b = 0.00268 + 1.61595I$	$7.27344 - 4.05568I$	0
$u = 1.59921 + 0.31569I$ $a = -0.589281 - 0.847626I$ $b = -0.121264 + 1.185740I$	$0.519660 + 0.341918I$	0
$u = 1.59921 - 0.31569I$ $a = -0.589281 + 0.847626I$ $b = -0.121264 - 1.185740I$	$0.519660 - 0.341918I$	0
$u = -1.66807 + 0.10006I$ $a = -0.148154 + 0.990473I$ $b = -0.35286 - 1.39288I$	$5.90864 - 0.86319I$	0
$u = -1.66807 - 0.10006I$ $a = -0.148154 - 0.990473I$ $b = -0.35286 + 1.39288I$	$5.90864 + 0.86319I$	0
$u = 1.42486 + 0.88427I$ $a = -0.543349 - 0.812666I$ $b = -0.073113 + 1.322830I$	$0.34448 + 1.46095I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.42486 - 0.88427I$ $a = -0.543349 + 0.812666I$ $b = -0.073113 - 1.322830I$	$0.34448 - 1.46095I$	0
$u = -1.65530 + 0.35198I$ $a = -0.228611 - 1.013180I$ $b = 0.14810 + 1.42442I$	$4.34530 - 3.39833I$	0
$u = -1.65530 - 0.35198I$ $a = -0.228611 + 1.013180I$ $b = 0.14810 - 1.42442I$	$4.34530 + 3.39833I$	0
$u = 1.67896 + 0.56416I$ $a = -0.062341 - 0.915295I$ $b = -0.69881 + 1.44153I$	$-3.54897 + 7.24525I$	0
$u = 1.67896 - 0.56416I$ $a = -0.062341 + 0.915295I$ $b = -0.69881 - 1.44153I$	$-3.54897 - 7.24525I$	0
$u = 1.74673 + 0.30476I$ $a = 0.194566 - 0.972442I$ $b = -0.38911 + 1.61323I$	$3.46954 + 10.71400I$	0
$u = 1.74673 - 0.30476I$ $a = 0.194566 + 0.972442I$ $b = -0.38911 - 1.61323I$	$3.46954 - 10.71400I$	0
$u = 1.48603 + 0.98544I$ $a = 0.129346 + 1.000480I$ $b = 0.39902 - 1.52526I$	$0.25276 + 6.84890I$	0
$u = 1.48603 - 0.98544I$ $a = 0.129346 - 1.000480I$ $b = 0.39902 + 1.52526I$	$0.25276 - 6.84890I$	0
$u = -1.79984 + 0.31515I$ $a = -0.209297 + 1.015280I$ $b = 0.213560 - 1.208730I$	$4.92575 + 0.66345I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.79984 - 0.31515I$ $a = -0.209297 - 1.015280I$ $b = 0.213560 + 1.208730I$	$4.92575 - 0.66345I$	0
$u = 0.166218 + 0.017157I$ $a = 0.82946 + 4.69831I$ $b = -1.264600 + 0.167920I$	$-2.81269 + 4.67156I$	$-3.12185 - 6.15405I$
$u = 0.166218 - 0.017157I$ $a = 0.82946 - 4.69831I$ $b = -1.264600 - 0.167920I$	$-2.81269 - 4.67156I$	$-3.12185 + 6.15405I$
$u = -1.74104 + 0.69909I$ $a = -0.054215 + 1.043500I$ $b = -0.64425 - 1.54738I$	$-3.2595 - 15.9571I$	0
$u = -1.74104 - 0.69909I$ $a = -0.054215 - 1.043500I$ $b = -0.64425 + 1.54738I$	$-3.2595 + 15.9571I$	0
$u = -0.26113 + 1.90968I$ $a = 0.237425 - 0.276892I$ $b = -0.036362 + 0.960242I$	$-8.52014 + 6.77449I$	0
$u = -0.26113 - 1.90968I$ $a = 0.237425 + 0.276892I$ $b = -0.036362 - 0.960242I$	$-8.52014 - 6.77449I$	0
$u = 2.11120 + 0.09785I$ $a = 0.086951 + 0.988989I$ $b = 0.556942 - 1.075320I$	$0.48418 + 2.25326I$	0
$u = 2.11120 - 0.09785I$ $a = 0.086951 - 0.988989I$ $b = 0.556942 + 1.075320I$	$0.48418 - 2.25326I$	0

II.
$\boldsymbol{I_2^u = \langle 4.71\times 10^{15}u^{19} - 6.48\times 10^{15}u^{18} + \cdots + 4.46\times 10^{16}b + 2.86\times 10^{16},\ 2.27\times 10^{16}u^{19} - 5.05\times 10^{16}u^{18} + \cdots + 8.93\times 10^{16}a - 2.12\times 10^{17},\ u^{20} - 2u^{19} + \cdots - 2u + 2\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.253955u^{19} + 0.565861u^{18} + \cdots - 4.57373u + 2.37382 \\ -0.105525u^{19} + 0.145096u^{18} + \cdots - 0.367388u - 0.641359 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.0104055u^{19} - 0.126171u^{18} + \cdots + 3.06894u - 0.296781 \\ 0.0899192u^{19} - 0.130317u^{18} + \cdots - 0.138878u + 0.437370 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.359480u^{19} + 0.710956u^{18} + \cdots - 4.94112u + 1.73246 \\ -0.105525u^{19} + 0.145096u^{18} + \cdots - 0.367388u - 0.641359 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0.903364u^{19} - 1.70724u^{18} + \cdots + 6.10414u - 3.55956 \\ 0.179321u^{19} - 0.253116u^{18} + \cdots + 3.73612u + 0.00874632 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.315050u^{19} - 1.00867u^{18} + \cdots - 5.55543u - 6.78367 \\ 0.355127u^{19} - 0.608260u^{18} + \cdots + 3.13098u - 1.15233 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -0.359480u^{19} + 0.710956u^{18} + \cdots - 4.94112u + 1.73246 \\ -0.206683u^{19} + 0.300685u^{18} + \cdots - 1.07034u - 0.657368 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.967208u^{19} + 1.77827u^{18} + \cdots - 7.37065u + 3.15992 \\ -0.0747343u^{19} + 0.110510u^{18} + \cdots - 2.88862u - 0.711932 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0.678448u^{19} - 1.42392u^{18} + \cdots + 7.26152u - 2.34715 \\ 0.0557314u^{19} - 0.0278410u^{18} + \cdots + 3.34451u + 0.244000 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= \frac{211251937779764826}{44645823690514751}u^{19} - \frac{469940708527626 17}{44645823690514751}u^{18} + \cdots + \frac{1284508003822 24996}{44645823690514751}u - \frac{896563895668882454}{44645823690514751}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20} - 4u^{19} + \cdots + 3u + 1$
c_2	$u^{20} - 3u^{19} + \cdots - 5u + 1$
c_3	$u^{20} - u^{19} + \cdots - 5u + 4$
c_4	$u^{20} - 2u^{19} + \cdots - 2u + 2$
c_5	$u^{20} - 3u^{19} + \cdots - 45u + 26$
c_6	$u^{20} + 7u^{18} + \cdots - 2u + 2$
c_7	$u^{20} - 12u^{18} + \cdots - 5u + 2$
c_8	$u^{20} + 2u^{19} + \cdots + 2u + 2$
c_9	$u^{20} + u^{19} + \cdots + 14u + 7$
c_{10}	$u^{20} - u^{19} + \cdots + u + 1$
c_{11}, c_{12}	$u^{20} - 12u^{18} + \cdots + 5u + 2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{20} + 10y^{19} + \cdots - 11y + 1$
c_2	$y^{20} - y^{19} + \cdots - 5y + 1$
c_3	$y^{20} + 17y^{19} + \cdots + 215y + 16$
c_4, c_8	$y^{20} - 14y^{19} + \cdots + 24y + 4$
c_5	$y^{20} + 13y^{19} + \cdots - 10865y + 676$
c_6	$y^{20} + 14y^{19} + \cdots + 32y + 4$
c_7, c_{11}, c_{12}	$y^{20} - 24y^{19} + \cdots - 41y + 4$
c_9	$y^{20} + 11y^{19} + \cdots - 378y + 49$
c_{10}	$y^{20} - 3y^{19} + \cdots + 11y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.445341 + 1.006900I$ $a = 0.378996 - 0.609489I$ $b = 0.475822 - 0.653916I$	$-9.54640 + 0.43274I$	$-14.2472 + 0.4571I$
$u = 0.445341 - 1.006900I$ $a = 0.378996 + 0.609489I$ $b = 0.475822 + 0.653916I$	$-9.54640 - 0.43274I$	$-14.2472 - 0.4571I$
$u = -0.305160 + 1.095290I$ $a = 0.017343 + 1.275150I$ $b = 0.472191 - 0.019528I$	$-10.53160 + 6.61475I$	$-10.62909 - 4.57987I$
$u = -0.305160 - 1.095290I$ $a = 0.017343 - 1.275150I$ $b = 0.472191 + 0.019528I$	$-10.53160 - 6.61475I$	$-10.62909 + 4.57987I$
$u = 0.819504 + 0.038714I$ $a = -0.461140 + 0.552148I$ $b = -1.156310 - 0.340346I$	$-5.16397 - 0.27439I$	$-4.64612 + 0.00082I$
$u = 0.819504 - 0.038714I$ $a = -0.461140 - 0.552148I$ $b = -1.156310 + 0.340346I$	$-5.16397 + 0.27439I$	$-4.64612 - 0.00082I$
$u = 0.054278 + 1.230410I$ $a = -0.163473 - 0.310256I$ $b = 0.599474 + 0.188835I$	$-4.48083 - 4.26522I$	$-11.29736 + 6.83205I$
$u = 0.054278 - 1.230410I$ $a = -0.163473 + 0.310256I$ $b = 0.599474 - 0.188835I$	$-4.48083 + 4.26522I$	$-11.29736 - 6.83205I$
$u = -1.396840 + 0.098244I$ $a = 0.477139 - 0.906250I$ $b = -0.11675 + 1.53608I$	$2.63581 + 2.60541I$	$-3.56183 - 0.71884I$
$u = -1.396840 - 0.098244I$ $a = 0.477139 + 0.906250I$ $b = -0.11675 - 1.53608I$	$2.63581 - 2.60541I$	$-3.56183 + 0.71884I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.33652 + 0.71442I$ $a = -0.185580 - 1.012890I$ $b = -0.48691 + 1.58830I$	$-0.48906 + 6.44073I$	$-7.25375 - 5.52907I$
$u = 1.33652 - 0.71442I$ $a = -0.185580 + 1.012890I$ $b = -0.48691 - 1.58830I$	$-0.48906 - 6.44073I$	$-7.25375 + 5.52907I$
$u = -0.291685 + 0.269932I$ $a = 1.83960 + 0.09965I$ $b = -0.920486 + 0.439782I$	$-2.17821 + 1.32113I$	$-17.8526 - 7.1209I$
$u = -0.291685 - 0.269932I$ $a = 1.83960 - 0.09965I$ $b = -0.920486 - 0.439782I$	$-2.17821 - 1.32113I$	$-17.8526 + 7.1209I$
$u = 0.164640 + 0.335831I$ $a = 2.58852 - 3.21941I$ $b = -0.684610 - 0.572192I$	$-9.34616 - 1.63192I$	$-23.0792 + 7.1433I$
$u = 0.164640 - 0.335831I$ $a = 2.58852 + 3.21941I$ $b = -0.684610 + 0.572192I$	$-9.34616 + 1.63192I$	$-23.0792 - 7.1433I$
$u = -1.76638 + 0.00494I$ $a = 0.060210 - 0.998278I$ $b = -0.323533 + 1.236200I$	$4.58999 + 1.40746I$	$-3.39132 - 5.03852I$
$u = -1.76638 - 0.00494I$ $a = 0.060210 + 0.998278I$ $b = -0.323533 - 1.236200I$	$4.58999 - 1.40746I$	$-3.39132 + 5.03852I$
$u = 1.93978 + 0.51365I$ $a = 0.448387 + 0.904270I$ $b = 0.141119 - 1.151680I$	$1.61171 + 0.65918I$	$1.95852 + 0.33886I$
$u = 1.93978 - 0.51365I$ $a = 0.448387 - 0.904270I$ $b = 0.141119 + 1.151680I$	$1.61171 - 0.65918I$	$1.95852 - 0.33886I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20} - 4u^{19} + \cdots + 3u + 1)(u^{69} + 3u^{68} + \cdots - 7855u - 844)$
c_2	$(u^{20} - 3u^{19} + \cdots - 5u + 1)(u^{69} + 4u^{68} + \cdots - 447u - 94)$
c_3	$(u^{20} - u^{19} + \cdots - 5u + 4)(u^{69} + 22u^{67} + \cdots + 4528u + 2690)$
c_4	$(u^{20} - 2u^{19} + \cdots - 2u + 2)(u^{69} + u^{68} + \cdots + 5598u + 326)$
c_5	$(u^{20} - 3u^{19} + \cdots - 45u + 26)(u^{69} + 2u^{67} + \cdots - 96u - 10)$
c_6	$(u^{20} + 7u^{18} + \cdots - 2u + 2)(u^{69} - 5u^{68} + \cdots - 1042u - 242)$
c_7	$(u^{20} - 12u^{18} + \cdots - 5u + 2)(u^{69} - u^{68} + \cdots + 8u + 2)$
c_8	$(u^{20} + 2u^{19} + \cdots + 2u + 2)(u^{69} + u^{68} + \cdots + 5598u + 326)$
c_9	$(u^{20} + u^{19} + \cdots + 14u + 7)(u^{69} + 37u^{67} + \cdots - 12439u + 1286)$
c_{10}	$(u^{20} - u^{19} + \cdots + u + 1)(u^{69} + 2u^{68} + \cdots + u + 2)$
c_{11}, c_{12}	$(u^{20} - 12u^{18} + \cdots + 5u + 2)(u^{69} - u^{68} + \cdots + 8u + 2)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{20} + 10y^{19} + \cdots - 11y + 1)$ $\cdot (y^{69} + 61y^{68} + \cdots - 33395831y - 712336)$
c_2	$(y^{20} - y^{19} + \cdots - 5y + 1)(y^{69} - 10y^{68} + \cdots + 187213y - 8836)$
c_3	$(y^{20} + 17y^{19} + \cdots + 215y + 16)$ $\cdot (y^{69} + 44y^{68} + \cdots - 160249076y - 7236100)$
c_4, c_8	$(y^{20} - 14y^{19} + \cdots + 24y + 4)$ $\cdot (y^{69} - 71y^{68} + \cdots + 10709628y - 106276)$
c_5	$(y^{20} + 13y^{19} + \cdots - 10865y + 676)$ $\cdot (y^{69} + 4y^{68} + \cdots - 111724y - 100)$
c_6	$(y^{20} + 14y^{19} + \cdots + 32y + 4)(y^{69} + 29y^{68} + \cdots - 1680780y - 58564)$
c_7, c_{11}, c_{12}	$(y^{20} - 24y^{19} + \cdots - 41y + 4)(y^{69} - 69y^{68} + \cdots - 1868y - 4)$
c_9	$(y^{20} + 11y^{19} + \cdots - 378y + 49)$ $\cdot (y^{69} + 74y^{68} + \cdots - 48598167y - 1653796)$
c_{10}	$(y^{20} - 3y^{19} + \cdots + 11y + 1)(y^{69} + 70y^{67} + \cdots - 99y - 4)$