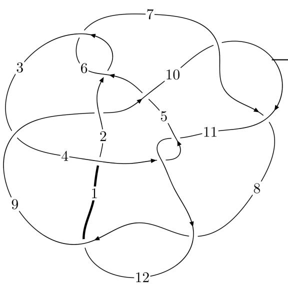
$12n_{0782}$ ($K12n_{0782}$)



A knot diagram[1]

Linearized knot diagam

$$\to\big\downarrow_{4}\to\big\uparrow_{6}\to\big\uparrow_{9}\to\big\downarrow_{12}\to\big\downarrow_{10}\to\big\uparrow_{3}\to\big\downarrow_{11}\to\big\uparrow_{12}\to\big\uparrow_{2}\to\big\downarrow_{7}\to\big\downarrow_{5}\to\big\uparrow_{9}\to$$

4 6 9 12 10 3 11 12 2 7 5 9

Solving Sequence

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

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

$$\begin{aligned}
I^u_1 = \langle & 5.27881\times10^{88}u^{57} - 4.69361\times10^{90}u^{56} + \cdots + 1.36590\times10^{92}b - 5.88184\times10^{92},\\
& -2.96745\times10^{93}u^{57} - 2.47917\times10^{93}u^{56} + \cdots + 8.04515\times10^{94}a + 3.43955\times10^{95},\\
& u^{58} + u^{57} + \cdots - 223u + 38\rangle\\
I^u_2 = \langle & 475169u^{17} + 381386u^{16} + \cdots + 522553b + 471664,\\
& -688088u^{17} - 1519820u^{16} + \cdots + 2612765a - 1890667,\ u^{18} + 15u^{16} + \cdots - 6u + 5\rangle
\end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 76 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. $I_1^u = \langle 5.28\times10^{88}u^{57} - 4.69\times10^{90}u^{56} + \cdots + 1.37\times10^{92}b - 5.88\times10^{92},\ -2.97\times10^{93}u^{57} - 2.48\times10^{93}u^{56} + \cdots + 8.05\times10^{94}a + 3.44\times10^{95},\ u^{58} + u^{57} + \cdots - 223u + 38\rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_6 = \begin{pmatrix}0.0368850u^{57} + 0.0308157u^{56} + \cdots + 41.2134u - 4.27531\\-0.000386471u^{57} + 0.0343628u^{56} + \cdots - 23.7709u + 4.30620\end{pmatrix}$$
$$a_7 = \begin{pmatrix}0.0364985u^{57} + 0.0651785u^{56} + \cdots + 17.4426u + 0.0308943\\-0.000386471u^{57} + 0.0343628u^{56} + \cdots - 23.7709u + 4.30620\end{pmatrix}$$
$$a_2 = \begin{pmatrix}0.0405848u^{57} + 0.0585166u^{56} + \cdots + 63.4140u - 5.65068\\-0.0519284u^{57} - 0.0695194u^{56} + \cdots - 12.5917u + 0.686208\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.106783u^{57} - 0.120253u^{56} + \cdots - 87.1353u + 3.59553\\0.0335600u^{57} + 0.0556513u^{56} + \cdots + 0.799424u + 0.951777\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0.00494700u^{57} + 0.0479532u^{56} + \cdots - 57.8669u + 5.20437\\0.0678161u^{57} + 0.0966838u^{56} + \cdots - 15.7287u + 4.42152\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-0.00916084u^{57} - 0.0269986u^{56} + \cdots + 53.2788u - 5.64588\\-0.0924440u^{57} - 0.175276u^{56} + \cdots - 6.50545u - 0.673036\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0.00126585u^{57} + 0.0187770u^{56} + \cdots - 50.5853u + 14.2462\\0.0175336u^{57} + 0.00565385u^{56} + \cdots - 1.20624u + 0.716555\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-0.00916084u^{57} - 0.0269986u^{56} + \cdots + 53.2788u - 5.64588\\-0.0497456u^{57} - 0.0855152u^{56} + \cdots - 10.1352u + 0.00479944\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0.0258619u^{57} + 0.106305u^{56} + \cdots + 55.7975u - 1.95424\\-0.0553761u^{57} + 0.0473162u^{56} + \cdots - 29.4845u + 3.10494\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.0872911u^{57} - 0.355385u^{56} + \cdots + 59.4278u - 12.0616$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{58} - 8u^{57} + \cdots - 59912u + 5747$
c_2, c_6	$u^{58} - 13u^{56} + \cdots - 638u + 247$
c_3	$u^{58} - u^{57} + \cdots + 223u + 38$
c_4, c_{11}	$u^{58} + 2u^{57} + \cdots - 4u + 47$
c_5	$u^{58} - u^{57} + \cdots - 155u + 118$
c_7, c_{10}	$u^{58} + 3u^{57} + \cdots + 410u + 25$
c_8, c_{12}	$u^{58} + 45u^{56} + \cdots + 1851u + 269$
c_9	$u^{58} - u^{57} + \cdots - 22u + 97$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{58} - 84y^{57} + \cdots + 622723954y + 33028009$
c_2, c_6	$y^{58} - 26y^{57} + \cdots - 629838y + 61009$
c_3	$y^{58} + 75y^{57} + \cdots + 81523y + 1444$
c_4, c_{11}	$y^{58} + 2y^{57} + \cdots + 4120y + 2209$
c_5	$y^{58} + 31y^{57} + \cdots + 80523y + 13924$
c_7, c_{10}	$y^{58} - 53y^{57} + \cdots - 18700y + 625$
c_8, c_{12}	$y^{58} + 90y^{57} + \cdots + 3009893y + 72361$
c_9	$y^{58} - 23y^{57} + \cdots - 9020y + 9409$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.853751 + 0.464332I$ $a = -0.0493088 - 0.0773017I$ $b = 0.203439 - 1.110150I$	$-2.63383 + 3.87803I$	$0. - 7.10067I$
$u = 0.853751 - 0.464332I$ $a = -0.0493088 + 0.0773017I$ $b = 0.203439 + 1.110150I$	$-2.63383 - 3.87803I$	$0. + 7.10067I$
$u = -1.062870 + 0.155680I$ $a = 1.383060 + 0.177575I$ $b = -1.287020 + 0.256764I$	$3.11643 - 0.54489I$	0
$u = -1.062870 - 0.155680I$ $a = 1.383060 - 0.177575I$ $b = -1.287020 - 0.256764I$	$3.11643 + 0.54489I$	0
$u = -0.112581 + 0.912921I$ $a = 0.15835 + 1.82362I$ $b = -0.965630 + 0.677508I$	$6.95013 - 2.72728I$	$5.05992 + 2.76752I$
$u = -0.112581 - 0.912921I$ $a = 0.15835 - 1.82362I$ $b = -0.965630 - 0.677508I$	$6.95013 + 2.72728I$	$5.05992 - 2.76752I$
$u = -0.084433 + 0.832538I$ $a = 0.0357940 + 0.0140818I$ $b = 1.140920 - 0.525982I$	$-0.82014 - 4.75740I$	$-0.14886 + 5.79153I$
$u = -0.084433 - 0.832538I$ $a = 0.0357940 - 0.0140818I$ $b = 1.140920 + 0.525982I$	$-0.82014 + 4.75740I$	$-0.14886 - 5.79153I$
$u = 0.782245 + 0.038291I$ $a = -1.99589 - 0.35305I$ $b = 1.222820 + 0.263072I$	$4.17334 + 3.33228I$	$6.92799 - 6.82937I$
$u = 0.782245 - 0.038291I$ $a = -1.99589 + 0.35305I$ $b = 1.222820 - 0.263072I$	$4.17334 - 3.33228I$	$6.92799 + 6.82937I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.099784 + 1.239980I$ $a = 0.46372 - 1.67392I$ $b = -0.933454 - 0.370814I$	$1.66999 + 1.54564I$	0
$u = 0.099784 - 1.239980I$ $a = 0.46372 + 1.67392I$ $b = -0.933454 + 0.370814I$	$1.66999 - 1.54564I$	0
$u = -0.014033 + 1.261280I$ $a = 0.753664 - 0.681102I$ $b = -0.889945 - 0.068116I$	$0.047703 + 0.198149I$	0
$u = -0.014033 - 1.261280I$ $a = 0.753664 + 0.681102I$ $b = -0.889945 + 0.068116I$	$0.047703 - 0.198149I$	0
$u = -0.450292 + 1.192360I$ $a = -0.624837 - 0.475798I$ $b = 1.338790 - 0.213313I$	$-0.33330 - 4.75057I$	0
$u = -0.450292 - 1.192360I$ $a = -0.624837 + 0.475798I$ $b = 1.338790 + 0.213313I$	$-0.33330 + 4.75057I$	0
$u = 0.003350 + 1.288710I$ $a = -0.209714 - 0.410378I$ $b = 0.136782 - 1.254630I$	$-4.85427 - 1.06680I$	0
$u = 0.003350 - 1.288710I$ $a = -0.209714 + 0.410378I$ $b = 0.136782 + 1.254630I$	$-4.85427 + 1.06680I$	0
$u = 0.314738 + 1.298090I$ $a = 1.025510 - 0.858022I$ $b = -1.39942 - 0.56356I$	$0.00633 + 7.27891I$	0
$u = 0.314738 - 1.298090I$ $a = 1.025510 + 0.858022I$ $b = -1.39942 + 0.56356I$	$0.00633 - 7.27891I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.123890 + 0.727662I$ $a = -1.289100 - 0.536945I$ $b = 1.288900 - 0.578954I$	$0.86445 - 9.82160I$	0
$u = -1.123890 - 0.727662I$ $a = -1.289100 + 0.536945I$ $b = 1.288900 + 0.578954I$	$0.86445 + 9.82160I$	0
$u = 0.460864 + 0.418666I$ $a = 0.57224 - 1.90811I$ $b = 0.385032 - 0.536811I$	$-3.08131 + 0.52947I$	$-3.73900 + 2.26505I$
$u = 0.460864 - 0.418666I$ $a = 0.57224 + 1.90811I$ $b = 0.385032 + 0.536811I$	$-3.08131 - 0.52947I$	$-3.73900 - 2.26505I$
$u = -0.124818 + 0.519430I$ $a = -1.71837 - 1.68133I$ $b = 0.919845 + 0.470366I$	$8.22063 + 1.95332I$	$-4.24227 - 5.07597I$
$u = -0.124818 - 0.519430I$ $a = -1.71837 + 1.68133I$ $b = 0.919845 - 0.470366I$	$8.22063 - 1.95332I$	$-4.24227 + 5.07597I$
$u = 0.22485 + 1.46017I$ $a = 0.043124 - 0.507703I$ $b = 0.579349 - 0.997182I$	$-5.11981 - 0.34192I$	0
$u = 0.22485 - 1.46017I$ $a = 0.043124 + 0.507703I$ $b = 0.579349 + 0.997182I$	$-5.11981 + 0.34192I$	0
$u = 0.164082 + 0.484192I$ $a = 1.39498 - 2.02846I$ $b = -1.157090 - 0.710262I$	$0.25031 + 5.18394I$	$-0.05460 - 3.88348I$
$u = 0.164082 - 0.484192I$ $a = 1.39498 + 2.02846I$ $b = -1.157090 + 0.710262I$	$0.25031 - 5.18394I$	$-0.05460 + 3.88348I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.10703 + 1.51586I$ $a = 1.05246 + 1.33886I$ $b = -0.837740 + 0.446217I$	$-9.50824 + 2.34060I$	0
$u = 0.10703 - 1.51586I$ $a = 1.05246 - 1.33886I$ $b = -0.837740 - 0.446217I$	$-9.50824 - 2.34060I$	0
$u = -0.03559 + 1.53038I$ $a = 0.256243 + 0.650105I$ $b = 0.747820 + 1.090540I$	$-8.19348 + 0.77858I$	0
$u = -0.03559 - 1.53038I$ $a = 0.256243 - 0.650105I$ $b = 0.747820 - 1.090540I$	$-8.19348 - 0.77858I$	0
$u = 0.06553 + 1.55280I$ $a = -0.549374 + 1.215700I$ $b = 1.141090 + 0.801942I$	$-6.78133 + 6.11938I$	0
$u = 0.06553 - 1.55280I$ $a = -0.549374 - 1.215700I$ $b = 1.141090 - 0.801942I$	$-6.78133 - 6.11938I$	0
$u = -0.190141 + 0.387639I$ $a = 0.446972 - 0.550746I$ $b = -0.192799 + 0.357060I$	$0.080144 - 0.948408I$	$1.62310 + 7.11083I$
$u = -0.190141 - 0.387639I$ $a = 0.446972 + 0.550746I$ $b = -0.192799 - 0.357060I$	$0.080144 + 0.948408I$	$1.62310 - 7.11083I$
$u = 0.32626 + 1.55223I$ $a = -0.241997 + 0.425422I$ $b = -0.520923 + 1.219600I$	$-9.24266 + 8.26916I$	0
$u = 0.32626 - 1.55223I$ $a = -0.241997 - 0.425422I$ $b = -0.520923 - 1.219600I$	$-9.24266 - 8.26916I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.26330+1.59853I$ $a=-0.745743-1.025400I$ $b=\ \ 1.115300-0.653239I$	$-3.26110-5.59088I$	0
$u=-0.26330-1.59853I$ $a=-0.745743+1.025400I$ $b=\ \ 1.115300+0.653239I$	$-3.26110+5.59088I$	0
$u=-0.08919+1.63634I$ $a=-0.271146+0.443919I$ $b=-0.871244+0.410826I$	$-9.42034-5.91809I$	0
$u=-0.08919-1.63634I$ $a=-0.271146-0.443919I$ $b=-0.871244-0.410826I$	$-9.42034+5.91809I$	0
$u=-0.061244+0.334869I$ $a=-1.148350-0.458209I$ $b=-0.615190-1.052660I$	$-1.66078+1.21898I$	$2.81157+3.35584I$
$u=-0.061244-0.334869I$ $a=-1.148350+0.458209I$ $b=-0.615190+1.052660I$	$-1.66078-1.21898I$	$2.81157-3.35584I$
$u=-0.36544+1.64783I$ $a=\ \ 0.783570+1.030920I$ $b=-1.25562+0.75255I$	$-6.7816-15.2640I$	0
$u=-0.36544-1.64783I$ $a=\ \ 0.783570-1.030920I$ $b=-1.25562-0.75255I$	$-6.7816+15.2640I$	0
$u=\ \ 0.27885+1.66834I$ $a=-1.15451+0.99467I$ $b=\ \ 0.909700+0.469646I$	$-9.60927+6.45837I$	0
$u=\ \ 0.27885-1.66834I$ $a=-1.15451-0.99467I$ $b=\ \ 0.909700-0.469646I$	$-9.60927-6.45837I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.18362+1.69215I$ $a=\ \ 0.093625+0.232044I$ $b=\ \ 0.763246+0.498750I$	$-10.07870-2.49709I$	0
$u=-0.18362-1.69215I$ $a=\ \ 0.093625-0.232044I$ $b=\ \ 0.763246-0.498750I$	$-10.07870+2.49709I$	0
$u=\ \ 0.37845+1.71205I$ $a=\ \ 0.706342-0.499000I$ $b=-0.905333-0.120347I$	$-0.134835+0.852804I$	0
$u=\ \ 0.37845-1.71205I$ $a=\ \ 0.706342+0.499000I$ $b=-0.905333+0.120347I$	$-0.134835-0.852804I$	0
$u=\ \ 0.140544+0.178449I$ $a=-6.15520+5.78279I$ $b=\ \ 0.906472-0.175526I$	$5.16615-0.70559I$	$5.44585-4.12571I$
$u=\ \ 0.140544-0.178449I$ $a=-6.15520-5.78279I$ $b=\ \ 0.906472+0.175526I$	$5.16615+0.70559I$	$5.44585+4.12571I$
$u=-0.53888+1.87728I$ $a=\ \ 0.760193-0.092180I$ $b=-0.968080-0.226728I$	$0.106752+0.734447I$	0
$u=-0.53888-1.87728I$ $a=\ \ 0.760193+0.092180I$ $b=-0.968080+0.226728I$	$0.106752-0.734447I$	0

II.
$\boldsymbol{I^u_2 = \langle 4.75 \times 10^5 u^{17} + 3.81 \times 10^5 u^{16} + \cdots + 5.23 \times 10^5 b + 4.72 \times 10^5,\ -6.88 \times 10^5 u^{17} - 1.52 \times 10^6 u^{16} + \cdots + 2.61 \times 10^6 a - 1.89 \times 10^6,\ u^{18} + 15u^{16} + \cdots - 6u + 5\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.263356u^{17} + 0.581690u^{16} + \cdots + 6.31256u + 0.723627 \\ -0.909322u^{17} - 0.729851u^{16} + \cdots - 3.71667u - 0.902615 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -0.645966u^{17} - 0.148161u^{16} + \cdots + 2.59588u - 0.178988 \\ -0.909322u^{17} - 0.729851u^{16} + \cdots - 3.71667u - 0.902615 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.438599u^{17} - 1.04958u^{16} + \cdots + 8.33106u - 1.44807 \\ 1.21931u^{17} - 1.02358u^{16} + \cdots + 6.40039u - 4.90381 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.292901u^{17} + 0.539668u^{16} + \cdots - 11.1573u + 0.328021 \\ -0.421190u^{17} + 0.836061u^{16} + \cdots - 0.273739u + 3.38165 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.838553u^{17} + 1.62104u^{16} + \cdots - 13.6838u + 2.62121 \\ -0.360666u^{17} + 1.17548u^{16} + \cdots - 0.934409u + 3.26121 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 1.03879u^{17} - 0.114254u^{16} + \cdots + 6.24100u - 1.10401 \\ 2.15736u^{17} + 1.13651u^{16} + \cdots + 3.78942u - 0.227208 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1.03604u^{17} + 0.677147u^{16} + \cdots + 0.313120u + 5.40611 \\ 0.552819u^{17} + 0.423534u^{16} + \cdots + 1.35440u - 0.433577 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1.03879u^{17} - 0.114254u^{16} + \cdots + 6.24100u - 1.10401 \\ 0.600192u^{17} + 0.935321u^{16} + \cdots - 2.09006u + 0.344065 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0.337287u^{17} - 2.39152u^{16} + \cdots + 13.1418u - 7.78875 \\ 0.219099u^{17} - 1.77164u^{16} + \cdots + 6.41323u - 6.77742 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{2079650}{522553}u^{17} - \frac{452334}{522553}u^{16} + \cdots - \frac{15376048}{522553}u + \frac{7059214}{522553}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 3u^{17} + \cdots + 2u + 1$
c_2	$u^{18} - u^{17} + \cdots - 2u + 1$
c_3	$u^{18} + 15u^{16} + \cdots - 6u + 5$
c_4	$u^{18} - u^{17} + \cdots + 4u^2 + 1$
c_5	$u^{18} + 11u^{16} + \cdots - 2u + 5$
c_6	$u^{18} + u^{17} + \cdots + 2u + 1$
c_7	$u^{18} + 2u^{17} + \cdots + 16u^2 + 7$
c_8	$u^{18} - u^{17} + \cdots - 5u + 1$
c_9	$u^{18} + 4u^{17} + \cdots + 8u + 1$
c_{10}	$u^{18} - 2u^{17} + \cdots + 16u^2 + 7$
c_{11}	$u^{18} + u^{17} + \cdots + 4u^2 + 1$
c_{12}	$u^{18} + u^{17} + \cdots + 5u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} - 13y^{17} + \cdots - 22y + 1$
c_2, c_6	$y^{18} - 7y^{17} + \cdots + 2y + 1$
c_3	$y^{18} + 30y^{17} + \cdots + 264y + 25$
c_4, c_{11}	$y^{18} + 13y^{17} + \cdots + 8y + 1$
c_5	$y^{18} + 22y^{17} + \cdots + 166y + 25$
c_7, c_{10}	$y^{18} - 18y^{17} + \cdots + 224y + 49$
c_8, c_{12}	$y^{18} + 13y^{17} + \cdots - 23y + 1$
c_9	$y^{18} - 16y^{17} + \cdots - 16y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.123064 + 1.252120I$ $a = 0.124206 - 1.294110I$ $b = -1.018510 - 0.849224I$	$5.67755 + 3.28436I$	$-0.59775 - 3.64061I$
$u = 0.123064 - 1.252120I$ $a = 0.124206 + 1.294110I$ $b = -1.018510 + 0.849224I$	$5.67755 - 3.28436I$	$-0.59775 + 3.64061I$
$u = -0.188606 + 1.266260I$ $a = -0.60866 - 1.59214I$ $b = 0.938103 - 0.153898I$	$2.12876 - 0.69203I$	$6.40220 - 1.90887I$
$u = -0.188606 - 1.266260I$ $a = -0.60866 + 1.59214I$ $b = 0.938103 + 0.153898I$	$2.12876 + 0.69203I$	$6.40220 + 1.90887I$
$u = -0.360505 + 1.231030I$ $a = -0.873740 - 0.802822I$ $b = 1.42199 - 0.68694I$	$-0.69011 - 7.09449I$	$-4.20097 + 7.45897I$
$u = -0.360505 - 1.231030I$ $a = -0.873740 + 0.802822I$ $b = 1.42199 + 0.68694I$	$-0.69011 + 7.09449I$	$-4.20097 - 7.45897I$
$u = 0.327917 + 0.627027I$ $a = 0.633937 - 0.499000I$ $b = -0.479081 - 0.805088I$	$-1.92128 + 1.96048I$	$-1.19573 - 5.62148I$
$u = 0.327917 - 0.627027I$ $a = 0.633937 + 0.499000I$ $b = -0.479081 + 0.805088I$	$-1.92128 - 1.96048I$	$-1.19573 + 5.62148I$
$u = 0.148616 + 1.285620I$ $a = 0.178421 - 0.531885I$ $b = 0.442168 - 1.232720I$	$-4.20955 - 0.11620I$	$1.70521 - 1.04373I$
$u = 0.148616 - 1.285620I$ $a = 0.178421 + 0.531885I$ $b = 0.442168 + 1.232720I$	$-4.20955 + 0.11620I$	$1.70521 + 1.04373I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.406284 + 0.439609I$ $a = 2.21319 + 2.32607I$ $b = -1.023940 + 0.328001I$	$5.13345 - 1.40589I$	$4.79141 + 5.59291I$
$u = -0.406284 - 0.439609I$ $a = 2.21319 - 2.32607I$ $b = -1.023940 - 0.328001I$	$5.13345 + 1.40589I$	$4.79141 - 5.59291I$
$u = 0.302439 + 0.399611I$ $a = -2.61290 + 1.39154I$ $b = 0.981313 - 0.425718I$	$8.63907 - 1.80668I$	$13.61479 - 1.09393I$
$u = 0.302439 - 0.399611I$ $a = -2.61290 - 1.39154I$ $b = 0.981313 + 0.425718I$	$8.63907 + 1.80668I$	$13.61479 + 1.09393I$
$u = 0.15623 + 1.60918I$ $a = 0.029868 + 0.885546I$ $b = 0.182577 + 0.324170I$	$-9.81955 + 4.31607I$	$-1.44430 - 2.37878I$
$u = 0.15623 - 1.60918I$ $a = 0.029868 - 0.885546I$ $b = 0.182577 - 0.324170I$	$-9.81955 - 4.31607I$	$-1.44430 + 2.37878I$
$u = -0.10287 + 2.43450I$ $a = 0.815671 - 0.193645I$ $b = -0.944622 - 0.152003I$	$-0.003534 + 0.615030I$	$-5.0749 + 47.0439I$
$u = -0.10287 - 2.43450I$ $a = 0.815671 + 0.193645I$ $b = -0.944622 + 0.152003I$	$-0.003534 - 0.615030I$	$-5.0749 - 47.0439I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18} - 3u^{17} + \cdots + 2u + 1)(u^{58} - 8u^{57} + \cdots - 59912u + 5747)$
c_2	$(u^{18} - u^{17} + \cdots - 2u + 1)(u^{58} - 13u^{56} + \cdots - 638u + 247)$
c_3	$(u^{18} + 15u^{16} + \cdots - 6u + 5)(u^{58} - u^{57} + \cdots + 223u + 38)$
c_4	$(u^{18} - u^{17} + \cdots + 4u^2 + 1)(u^{58} + 2u^{57} + \cdots - 4u + 47)$
c_5	$(u^{18} + 11u^{16} + \cdots - 2u + 5)(u^{58} - u^{57} + \cdots - 155u + 118)$
c_6	$(u^{18} + u^{17} + \cdots + 2u + 1)(u^{58} - 13u^{56} + \cdots - 638u + 247)$
c_7	$(u^{18} + 2u^{17} + \cdots + 16u^2 + 7)(u^{58} + 3u^{57} + \cdots + 410u + 25)$
c_8	$(u^{18} - u^{17} + \cdots - 5u + 1)(u^{58} + 45u^{56} + \cdots + 1851u + 269)$
c_9	$(u^{18} + 4u^{17} + \cdots + 8u + 1)(u^{58} - u^{57} + \cdots - 22u + 97)$
c_{10}	$(u^{18} - 2u^{17} + \cdots + 16u^2 + 7)(u^{58} + 3u^{57} + \cdots + 410u + 25)$
c_{11}	$(u^{18} + u^{17} + \cdots + 4u^2 + 1)(u^{58} + 2u^{57} + \cdots - 4u + 47)$
c_{12}	$(u^{18} + u^{17} + \cdots + 5u + 1)(u^{58} + 45u^{56} + \cdots + 1851u + 269)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18} - 13y^{17} + \cdots - 22y + 1)$ $\cdot\, (y^{58} - 84y^{57} + \cdots + 622723954y + 33028009)$
c_2, c_6	$(y^{18} - 7y^{17} + \cdots + 2y + 1)(y^{58} - 26y^{57} + \cdots - 629838y + 61009)$
c_3	$(y^{18} + 30y^{17} + \cdots + 264y + 25)(y^{58} + 75y^{57} + \cdots + 81523y + 1444)$
c_4, c_{11}	$(y^{18} + 13y^{17} + \cdots + 8y + 1)(y^{58} + 2y^{57} + \cdots + 4120y + 2209)$
c_5	$(y^{18} + 22y^{17} + \cdots + 166y + 25)(y^{58} + 31y^{57} + \cdots + 80523y + 13924)$
c_7, c_{10}	$(y^{18} - 18y^{17} + \cdots + 224y + 49)(y^{58} - 53y^{57} + \cdots - 18700y + 625)$
c_8, c_{12}	$(y^{18} + 13y^{17} + \cdots - 23y + 1)(y^{58} + 90y^{57} + \cdots + 3009893y + 72361)$
c_9	$(y^{18} - 16y^{17} + \cdots - 16y + 1)(y^{58} - 23y^{57} + \cdots - 9020y + 9409)$