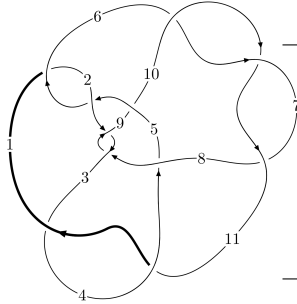
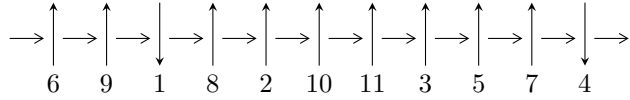


11a₂₉₅ (K11a₂₉₅)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 1.78746 \times 10^{142} u^{65} - 5.99607 \times 10^{142} u^{64} + \dots + 1.18505 \times 10^{143} b - 1.11034 \times 10^{143}, \\ 3.02457 \times 10^{142} u^{65} - 1.75060 \times 10^{143} u^{64} + \dots + 1.54056 \times 10^{144} a - 1.74902 \times 10^{145}, \\ u^{66} - 3u^{65} + \dots + 110u + 13 \rangle$$

$$I_2^u = \langle -u^{11} - u^{10} - 4u^9 + 2u^8 - 2u^7 + 15u^6 + 5u^5 + 22u^4 + 3u^3 + 11u^2 + b + 3, \\ -u^{11} - u^{10} - 4u^9 + 3u^8 + 21u^6 + 11u^5 + 34u^4 + 10u^3 + 21u^2 + a + u + 6, \\ u^{12} + 2u^{11} + 7u^{10} + 7u^9 + 16u^8 + 8u^7 + 18u^6 + 2u^5 + 12u^4 - u^3 + 5u^2 - u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 78 representations.

¹The 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>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\mathbf{I. } I_1^u = \langle 1.79 \times 10^{142} u^{65} - 6.00 \times 10^{142} u^{64} + \dots + 1.19 \times 10^{143} b - 1.11 \times 10^{143}, 3.02 \times 10^{142} u^{65} - 1.75 \times 10^{143} u^{64} + \dots + 1.54 \times 10^{144} a - 1.75 \times 10^{145}, u^{66} - 3u^{65} + \dots + 110u + 13 \rangle$$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.0196329u^{65} + 0.113634u^{64} + \dots + 62.9028u + 11.3531 \\ -0.150834u^{65} + 0.505977u^{64} + \dots - 0.0314640u + 0.936954 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.224234u^{65} - 1.09610u^{64} + \dots - 36.1801u - 11.7809 \\ -0.140984u^{65} + 0.152723u^{64} + \dots - 27.9416u - 3.17071 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.170467u^{65} + 0.619610u^{64} + \dots + 62.8714u + 12.2901 \\ -0.150834u^{65} + 0.505977u^{64} + \dots - 0.0314640u + 0.936954 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.199233u^{65} - 0.317764u^{64} + \dots + 22.5218u + 12.9750 \\ 0.0667194u^{65} - 0.184659u^{64} + \dots - 2.86894u - 0.266940 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.0736024u^{65} + 0.158855u^{64} + \dots + 67.7003u - 0.0987364 \\ -0.227329u^{65} + 0.752818u^{64} + \dots + 4.04994u + 1.37421 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.194772u^{65} + 0.662394u^{64} + \dots + 62.4963u + 11.6877 \\ -0.129513u^{65} + 0.444863u^{64} + \dots - 0.728868u + 0.968066 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.403268u^{65} - 1.30013u^{64} + \dots + 75.9641u + 9.20323 \\ -0.00829394u^{65} - 0.0286337u^{64} + \dots - 10.4471u - 0.0802321 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.403268u^{65} - 1.30013u^{64} + \dots + 75.9641u + 9.20323 \\ -0.00829394u^{65} - 0.0286337u^{64} + \dots - 10.4471u - 0.0802321 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-0.295766u^{65} + 1.20445u^{64} + \dots + 70.0120u + 13.0476$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{66} - 2u^{65} + \dots - 337u + 121$
c_2, c_8	$u^{66} + u^{65} + \dots + 262u - 97$
c_3, c_{11}	$u^{66} - 3u^{65} + \dots + 110u + 13$
c_4	$u^{66} - 5u^{65} + \dots + 3840u - 1447$
c_6, c_7, c_{10}	$u^{66} - 5u^{65} + \dots - 3u - 1$
c_9	$u^{66} + 5u^{64} + \dots + 2311u - 389$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{66} + 42y^{65} + \dots + 122865y + 14641$
c_2, c_8	$y^{66} + 49y^{65} + \dots + 143204y + 9409$
c_3, c_{11}	$y^{66} + 47y^{65} + \dots - 3000y + 169$
c_4	$y^{66} - 19y^{65} + \dots - 13709548y + 2093809$
c_6, c_7, c_{10}	$y^{66} - 71y^{65} + \dots + 29y + 1$
c_9	$y^{66} + 10y^{65} + \dots + 4949885y + 151321$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.346412 + 0.925436I$ $a = -2.05986 + 0.31273I$ $b = -0.044674 - 1.054040I$	$-3.85841 + 0.35943I$	$2.42133 + 0.I$
$u = 0.346412 - 0.925436I$ $a = -2.05986 - 0.31273I$ $b = -0.044674 + 1.054040I$	$-3.85841 - 0.35943I$	$2.42133 + 0.I$
$u = 0.045813 + 1.027510I$ $a = 0.758381 + 1.185930I$ $b = -0.156972 + 1.390430I$	$0.60146 - 4.40690I$	$7.00000 + 3.71176I$
$u = 0.045813 - 1.027510I$ $a = 0.758381 - 1.185930I$ $b = -0.156972 - 1.390430I$	$0.60146 + 4.40690I$	$7.00000 - 3.71176I$
$u = -0.041627 + 1.032380I$ $a = -0.801128 + 1.092490I$ $b = 0.26921 - 1.73433I$	$4.74716 + 0.24143I$	$11.20357 + 0.I$
$u = -0.041627 - 1.032380I$ $a = -0.801128 - 1.092490I$ $b = 0.26921 + 1.73433I$	$4.74716 - 0.24143I$	$11.20357 + 0.I$
$u = -0.955497 + 0.038825I$ $a = 0.667759 - 0.483417I$ $b = -0.271741 - 1.131810I$	$3.45574 + 3.28085I$	$8.60109 - 3.29735I$
$u = -0.955497 - 0.038825I$ $a = 0.667759 + 0.483417I$ $b = -0.271741 + 1.131810I$	$3.45574 - 3.28085I$	$8.60109 + 3.29735I$
$u = 1.032800 + 0.239480I$ $a = -0.050681 - 0.394512I$ $b = -0.387740 - 1.305760I$	$-6.38275 + 5.64915I$	0
$u = 1.032800 - 0.239480I$ $a = -0.050681 + 0.394512I$ $b = -0.387740 + 1.305760I$	$-6.38275 - 5.64915I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.673097 + 0.824613I$ $a = 0.99902 + 1.36443I$ $b = -0.023131 + 1.237410I$	$-1.08058 - 2.59004I$	0
$u = 0.673097 - 0.824613I$ $a = 0.99902 - 1.36443I$ $b = -0.023131 - 1.237410I$	$-1.08058 + 2.59004I$	0
$u = 0.089061 + 1.093600I$ $a = 1.49100 + 0.23600I$ $b = -0.809871 - 0.432123I$	$3.37039 - 1.11848I$	0
$u = 0.089061 - 1.093600I$ $a = 1.49100 - 0.23600I$ $b = -0.809871 + 0.432123I$	$3.37039 + 1.11848I$	0
$u = 0.050328 + 0.893916I$ $a = 1.40705 - 2.33343I$ $b = 0.115704 + 1.020080I$	$0.16047 + 3.95702I$	$8.80042 - 3.39843I$
$u = 0.050328 - 0.893916I$ $a = 1.40705 + 2.33343I$ $b = 0.115704 - 1.020080I$	$0.16047 - 3.95702I$	$8.80042 + 3.39843I$
$u = 0.335391 + 1.071700I$ $a = 1.72267 - 0.57423I$ $b = -0.64639 + 1.48451I$	$-3.39375 - 5.20124I$	0
$u = 0.335391 - 1.071700I$ $a = 1.72267 + 0.57423I$ $b = -0.64639 - 1.48451I$	$-3.39375 + 5.20124I$	0
$u = -0.431490 + 1.050920I$ $a = -0.0006410 - 0.0716660I$ $b = 0.006605 + 0.382994I$	$0.63556 + 2.23216I$	0
$u = -0.431490 - 1.050920I$ $a = -0.0006410 + 0.0716660I$ $b = 0.006605 - 0.382994I$	$0.63556 - 2.23216I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.087080 + 0.373490I$ $a = -0.074311 - 0.348838I$ $b = 0.672686 - 0.122268I$	$2.99874 + 4.32150I$	0
$u = -1.087080 - 0.373490I$ $a = -0.074311 + 0.348838I$ $b = 0.672686 + 0.122268I$	$2.99874 - 4.32150I$	0
$u = 0.347155 + 0.753957I$ $a = -0.68430 - 1.36547I$ $b = 0.142627 - 1.332550I$	$-4.54149 - 3.48085I$	$1.46862 + 11.56926I$
$u = 0.347155 - 0.753957I$ $a = -0.68430 + 1.36547I$ $b = 0.142627 + 1.332550I$	$-4.54149 + 3.48085I$	$1.46862 - 11.56926I$
$u = -0.239265 + 1.179210I$ $a = -1.57985 + 0.23626I$ $b = 1.40483 + 0.19256I$	$1.69376 + 4.59816I$	0
$u = -0.239265 - 1.179210I$ $a = -1.57985 - 0.23626I$ $b = 1.40483 - 0.19256I$	$1.69376 - 4.59816I$	0
$u = 0.055605 + 1.217090I$ $a = 1.108100 + 0.672882I$ $b = -0.97672 - 1.47152I$	$4.71138 - 2.03235I$	0
$u = 0.055605 - 1.217090I$ $a = 1.108100 - 0.672882I$ $b = -0.97672 + 1.47152I$	$4.71138 + 2.03235I$	0
$u = 0.781623$ $a = 0.771378$ $b = -0.638431$	6.81634	14.5150
$u = -0.748237 + 0.016944I$ $a = -0.293962 + 0.332817I$ $b = 0.086918 + 1.120970I$	$-2.54829 + 1.52445I$	$3.35567 - 4.49090I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.748237 - 0.016944I$ $a = -0.293962 - 0.332817I$ $b = 0.086918 - 1.120970I$	$-2.54829 - 1.52445I$	$3.35567 + 4.49090I$
$u = -0.243695 + 1.234620I$ $a = -0.863749 - 0.292464I$ $b = 0.489851 + 0.829291I$	$1.02770 + 2.29601I$	0
$u = -0.243695 - 1.234620I$ $a = -0.863749 + 0.292464I$ $b = 0.489851 - 0.829291I$	$1.02770 - 2.29601I$	0
$u = 0.728717 + 1.033480I$ $a = 0.996190 + 0.473778I$ $b = -0.083413 + 1.085400I$	$-1.28963 - 3.11000I$	0
$u = 0.728717 - 1.033480I$ $a = 0.996190 - 0.473778I$ $b = -0.083413 - 1.085400I$	$-1.28963 + 3.11000I$	0
$u = -0.390931 + 1.215750I$ $a = 1.53205 + 0.42878I$ $b = -0.420123 - 1.112900I$	$1.13230 + 5.61385I$	0
$u = -0.390931 - 1.215750I$ $a = 1.53205 - 0.42878I$ $b = -0.420123 + 1.112900I$	$1.13230 - 5.61385I$	0
$u = -0.353791 + 1.249110I$ $a = -0.952423 - 0.041954I$ $b = 0.580495 + 0.820287I$	$1.05491 + 2.33150I$	0
$u = -0.353791 - 1.249110I$ $a = -0.952423 + 0.041954I$ $b = 0.580495 - 0.820287I$	$1.05491 - 2.33150I$	0
$u = 0.501327 + 0.452690I$ $a = 0.598700 - 0.082777I$ $b = 0.32459 + 1.44481I$	$-5.36608 + 1.78436I$	$3.12908 + 1.84447I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.501327 - 0.452690I$ $a = 0.598700 + 0.082777I$ $b = 0.32459 - 1.44481I$	$-5.36608 - 1.78436I$	$3.12908 - 1.84447I$
$u = 0.365423 + 1.275750I$ $a = -1.277800 - 0.378899I$ $b = 0.805170 + 0.171054I$	$10.80040 - 4.11654I$	0
$u = 0.365423 - 1.275750I$ $a = -1.277800 + 0.378899I$ $b = 0.805170 - 0.171054I$	$10.80040 + 4.11654I$	0
$u = 0.541093 + 1.238690I$ $a = -1.53767 + 0.14911I$ $b = 0.57803 - 1.42790I$	$-3.18615 - 11.21570I$	0
$u = 0.541093 - 1.238690I$ $a = -1.53767 - 0.14911I$ $b = 0.57803 + 1.42790I$	$-3.18615 + 11.21570I$	0
$u = -0.597212 + 0.109134I$ $a = -0.487440 + 0.615944I$ $b = -0.646631 - 0.152437I$	$-2.00698 + 1.67505I$	$2.85750 - 4.67727I$
$u = -0.597212 - 0.109134I$ $a = -0.487440 - 0.615944I$ $b = -0.646631 + 0.152437I$	$-2.00698 - 1.67505I$	$2.85750 + 4.67727I$
$u = 1.40981 + 0.11612I$ $a = -0.163095 + 0.411198I$ $b = 0.430569 + 1.221430I$	$-0.32445 + 8.55031I$	0
$u = 1.40981 - 0.11612I$ $a = -0.163095 - 0.411198I$ $b = 0.430569 - 1.221430I$	$-0.32445 - 8.55031I$	0
$u = -0.51734 + 1.31863I$ $a = -1.62787 - 0.07441I$ $b = 0.418270 + 1.216760I$	$7.53925 + 8.57953I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.51734 - 1.31863I$ $a = -1.62787 + 0.07441I$ $b = 0.418270 - 1.216760I$	$7.53925 - 8.57953I$	0
$u = -0.39858 + 1.41998I$ $a = 1.206100 - 0.227250I$ $b = -1.212910 - 0.088188I$	$8.62445 + 9.32694I$	0
$u = -0.39858 - 1.41998I$ $a = 1.206100 + 0.227250I$ $b = -1.212910 + 0.088188I$	$8.62445 - 9.32694I$	0
$u = 0.16422 + 1.53291I$ $a = 0.599718 - 0.042213I$ $b = -0.669641 - 0.580855I$	$6.78842 + 2.02734I$	0
$u = 0.16422 - 1.53291I$ $a = 0.599718 + 0.042213I$ $b = -0.669641 + 0.580855I$	$6.78842 - 2.02734I$	0
$u = 0.63083 + 1.41800I$ $a = 1.348130 - 0.018048I$ $b = -0.55812 + 1.41815I$	$3.9251 - 15.5092I$	0
$u = 0.63083 - 1.41800I$ $a = 1.348130 + 0.018048I$ $b = -0.55812 - 1.41815I$	$3.9251 + 15.5092I$	0
$u = -0.50208 + 1.52607I$ $a = -0.240163 + 0.136220I$ $b = 0.200360 - 0.695523I$	$7.42737 + 2.83943I$	0
$u = -0.50208 - 1.52607I$ $a = -0.240163 - 0.136220I$ $b = 0.200360 + 0.695523I$	$7.42737 - 2.83943I$	0
$u = -0.74136 + 1.51980I$ $a = 0.786039 - 0.184606I$ $b = -0.662180 - 0.862296I$	$6.10476 + 3.03885I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.74136 - 1.51980I$ $a = 0.786039 + 0.184606I$ $b = -0.662180 + 0.862296I$	$6.10476 - 3.03885I$	0
$u = 1.01838 + 1.36708I$ $a = -0.624946 - 0.274570I$ $b = 0.141222 - 1.012850I$	$6.59255 - 4.44136I$	0
$u = 1.01838 - 1.36708I$ $a = -0.624946 + 0.274570I$ $b = 0.141222 + 1.012850I$	$6.59255 + 4.44136I$	0
$u = 0.185031$ $a = -1.77117$ $b = 0.368557$	0.660290	15.1130
$u = -0.0705906 + 0.0713114I$ $a = 6.94504 + 10.19820I$ $b = 0.538056 - 0.549223I$	$1.13118 + 1.76995I$	$5.98304 + 2.62479I$
$u = -0.0705906 - 0.0713114I$ $a = 6.94504 - 10.19820I$ $b = 0.538056 + 0.549223I$	$1.13118 - 1.76995I$	$5.98304 - 2.62479I$

$$I_2^u = \langle -u^{11} - u^{10} + \dots + b + 3, -u^{11} - u^{10} + \dots + a + 6, u^{12} + 2u^{11} + \dots - u + 1 \rangle$$

II.

(i) Arc colorings

$$\begin{aligned} a_1 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_3 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 1 \\ u^2 \end{pmatrix} \\ a_8 &= \begin{pmatrix} u^{11} + u^{10} + 4u^9 - 3u^8 - 21u^6 - 11u^5 - 34u^4 - 10u^3 - 21u^2 - u - 6 \\ u^{11} + u^{10} + 4u^9 - 2u^8 + 2u^7 - 15u^6 - 5u^5 - 22u^4 - 3u^3 - 11u^2 - 3 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -7u^{11} - 17u^{10} + \dots - 18u + 3 \\ -u^{11} - 2u^{10} + \dots - 4u + 2 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 2u^{11} + 2u^{10} + \dots - u - 9 \\ u^{11} + u^{10} + 4u^9 - 2u^8 + 2u^7 - 15u^6 - 5u^5 - 22u^4 - 3u^3 - 11u^2 - 3 \end{pmatrix} \\ a_2 &= \begin{pmatrix} 4u^{11} + 7u^{10} + \dots + 9u - 8 \\ -u^{10} - 2u^9 - 6u^8 - 5u^7 - 10u^6 - 3u^5 - 8u^4 + u^3 - 4u^2 - 2 \end{pmatrix} \\ a_6 &= \begin{pmatrix} u^{11} + 3u^{10} + \dots + 4u + 4 \\ u^{11} + 2u^{10} + 6u^9 + 5u^8 + 10u^7 + 3u^6 + 8u^5 - u^4 + 4u^3 + u^2 + 2u \end{pmatrix} \\ a_{11} &= \begin{pmatrix} u \\ u^3 + u \end{pmatrix} \\ a_7 &= \begin{pmatrix} u^{11} + u^{10} + 4u^9 - 3u^8 - 21u^6 - 11u^5 - 33u^4 - 9u^3 - 19u^2 - u - 5 \\ u^{11} + u^{10} + 4u^9 - 2u^8 + 2u^7 - 14u^6 - 4u^5 - 19u^4 - 2u^3 - 8u^2 - 2 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -u^{11} - u^9 + \dots + 5u + 6 \\ u^{11} + 3u^{10} + \dots + 3u + 2 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -u^{11} - u^9 + \dots + 5u + 6 \\ u^{11} + 3u^{10} + \dots + 3u + 2 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes

$$= 4u^{11} + 11u^{10} + 35u^9 + 50u^8 + 91u^7 + 84u^6 + 111u^5 + 63u^4 + 65u^3 + 24u^2 + 15u + 13$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{12} - u^{11} + \dots + 2u + 1$
c_2	$u^{12} + 6u^{10} + \dots - 3u + 1$
c_3	$u^{12} + 2u^{11} + \dots - u + 1$
c_4	$u^{12} + 2u^{10} - 3u^9 + 7u^8 - 6u^6 + 8u^5 + 7u^4 - 2u^3 + u^2 + 3u + 1$
c_5	$u^{12} + u^{11} + \dots - 2u + 1$
c_6, c_7	$u^{12} - 8u^{10} + 24u^8 - 32u^6 - u^5 + 18u^4 + u^3 - 3u^2 + 1$
c_8	$u^{12} + 6u^{10} + \dots + 3u + 1$
c_9	$u^{12} + u^{11} - u^{10} + 7u^8 - 8u^7 + 7u^6 - 5u^5 + 10u^4 - 10u^3 + 7u^2 - 2u + 1$
c_{10}	$u^{12} - 8u^{10} + 24u^8 - 32u^6 + u^5 + 18u^4 - u^3 - 3u^2 + 1$
c_{11}	$u^{12} - 2u^{11} + \dots + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{12} + 9y^{11} + \dots + 10y + 1$
c_2, c_8	$y^{12} + 12y^{11} + \dots + 5y + 1$
c_3, c_{11}	$y^{12} + 10y^{11} + \dots + 9y + 1$
c_4	$y^{12} + 4y^{11} + \dots - 7y + 1$
c_6, c_7, c_{10}	$y^{12} - 16y^{11} + \dots - 6y + 1$
c_9	$y^{12} - 3y^{11} + \dots + 10y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.369646 + 0.777513I$ $a = -0.17021 + 1.45709I$ $b = 0.436264 - 0.375928I$	$1.64985 + 2.57365I$	$12.02620 - 3.39540I$
$u = -0.369646 - 0.777513I$ $a = -0.17021 - 1.45709I$ $b = 0.436264 + 0.375928I$	$1.64985 - 2.57365I$	$12.02620 + 3.39540I$
$u = 0.149040 + 1.211350I$ $a = 0.533757 + 0.789884I$ $b = -0.57539 - 1.56859I$	$5.02229 - 1.34240I$	$13.23433 + 1.17063I$
$u = 0.149040 - 1.211350I$ $a = 0.533757 - 0.789884I$ $b = -0.57539 + 1.56859I$	$5.02229 + 1.34240I$	$13.23433 - 1.17063I$
$u = 0.286338 + 0.674056I$ $a = 1.23982 + 0.95839I$ $b = -0.211327 + 1.361950I$	$-4.35770 - 2.95981I$	$6.70212 - 1.32008I$
$u = 0.286338 - 0.674056I$ $a = 1.23982 - 0.95839I$ $b = -0.211327 - 1.361950I$	$-4.35770 + 2.95981I$	$6.70212 + 1.32008I$
$u = -0.512766 + 1.211820I$ $a = -0.805948 + 0.152900I$ $b = 0.476182 + 0.586558I$	$0.99987 + 2.95882I$	$8.95384 - 10.28538I$
$u = -0.512766 - 1.211820I$ $a = -0.805948 - 0.152900I$ $b = 0.476182 - 0.586558I$	$0.99987 - 2.95882I$	$8.95384 + 10.28538I$
$u = 0.321964 + 0.480875I$ $a = 0.07177 - 3.69908I$ $b = 0.151135 - 1.234650I$	$-1.09062 - 4.53454I$	$3.08537 + 5.69650I$
$u = 0.321964 - 0.480875I$ $a = 0.07177 + 3.69908I$ $b = 0.151135 + 1.234650I$	$-1.09062 + 4.53454I$	$3.08537 - 5.69650I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.87493 + 1.46525I$		
$a = 0.630802 - 0.177646I$	$7.64591 + 4.32752I$	$14.4982 - 5.1187I$
$b = -0.276860 - 0.753139I$		
$u = -0.87493 - 1.46525I$		
$a = 0.630802 + 0.177646I$	$7.64591 - 4.32752I$	$14.4982 + 5.1187I$
$b = -0.276860 + 0.753139I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{12} - u^{11} + \dots + 2u + 1)(u^{66} - 2u^{65} + \dots - 337u + 121)$
c_2	$(u^{12} + 6u^{10} + \dots - 3u + 1)(u^{66} + u^{65} + \dots + 262u - 97)$
c_3	$(u^{12} + 2u^{11} + \dots - u + 1)(u^{66} - 3u^{65} + \dots + 110u + 13)$
c_4	$(u^{12} + 2u^{10} - 3u^9 + 7u^8 - 6u^6 + 8u^5 + 7u^4 - 2u^3 + u^2 + 3u + 1)$ $\cdot (u^{66} - 5u^{65} + \dots + 3840u - 1447)$
c_5	$(u^{12} + u^{11} + \dots - 2u + 1)(u^{66} - 2u^{65} + \dots - 337u + 121)$
c_6, c_7	$(u^{12} - 8u^{10} + 24u^8 - 32u^6 - u^5 + 18u^4 + u^3 - 3u^2 + 1)$ $\cdot (u^{66} - 5u^{65} + \dots - 3u - 1)$
c_8	$(u^{12} + 6u^{10} + \dots + 3u + 1)(u^{66} + u^{65} + \dots + 262u - 97)$
c_9	$(u^{12} + u^{11} - u^{10} + 7u^8 - 8u^7 + 7u^6 - 5u^5 + 10u^4 - 10u^3 + 7u^2 - 2u + 1)$ $\cdot (u^{66} + 5u^{64} + \dots + 2311u - 389)$
c_{10}	$(u^{12} - 8u^{10} + 24u^8 - 32u^6 + u^5 + 18u^4 - u^3 - 3u^2 + 1)$ $\cdot (u^{66} - 5u^{65} + \dots - 3u - 1)$
c_{11}	$(u^{12} - 2u^{11} + \dots + u + 1)(u^{66} - 3u^{65} + \dots + 110u + 13)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{12} + 9y^{11} + \dots + 10y + 1)(y^{66} + 42y^{65} + \dots + 122865y + 14641)$
c_2, c_8	$(y^{12} + 12y^{11} + \dots + 5y + 1)(y^{66} + 49y^{65} + \dots + 143204y + 9409)$
c_3, c_{11}	$(y^{12} + 10y^{11} + \dots + 9y + 1)(y^{66} + 47y^{65} + \dots - 3000y + 169)$
c_4	$(y^{12} + 4y^{11} + \dots - 7y + 1)$ $\cdot (y^{66} - 19y^{65} + \dots - 13709548y + 2093809)$
c_6, c_7, c_{10}	$(y^{12} - 16y^{11} + \dots - 6y + 1)(y^{66} - 71y^{65} + \dots + 29y + 1)$
c_9	$(y^{12} - 3y^{11} + \dots + 10y + 1)(y^{66} + 10y^{65} + \dots + 4949885y + 151321)$