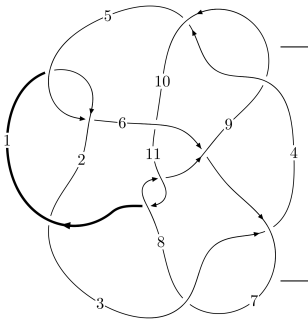
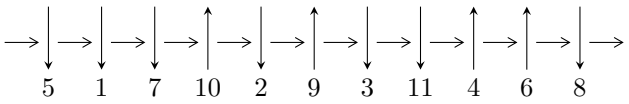
$11a_{115}$ ($K11a_{115}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3.32851 \times 10^{102} u^{77} - 1.61333 \times 10^{103} u^{76} + \cdots + 2.32216 \times 10^{103} b + 2.92650 \times 10^{103},$$
$$- 2.22107 \times 10^{103} u^{77} + 8.11330 \times 10^{103} u^{76} + \cdots + 2.32216 \times 10^{103} a + 2.42675 \times 10^{104},$$
$$u^{78} - 3u^{77} + \cdots + 10u + 1 \rangle$$
$$I_2^u = \langle -2u^{17} - 2u^{16} + \cdots + b - 3,\ -4u^{17} - 5u^{16} + \cdots + a - 3,\ u^{18} + 2u^{17} + \cdots + 2u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 96 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. $\boldsymbol{I_1^u = \langle 3.33 \times 10^{102} u^{77} - 1.61 \times 10^{103} u^{76} + \cdots + 2.32 \times 10^{103} b + 2.93 \times 10^{103},\ -2.22 \times 10^{103} u^{77} + 8.11 \times 10^{103} u^{76} + \cdots + 2.32 \times 10^{103} a + 2.43 \times 10^{104},\ u^{78} - 3u^{77} + \cdots + 10u + 1 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.956467u^{77} - 3.49386u^{76} + \cdots + 58.2139u - 10.4504 \\ -0.143337u^{77} + 0.694752u^{76} + \cdots - 11.2798u - 1.26025 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.623458u^{77} - 2.49883u^{76} + \cdots + 44.5704u - 11.9913 \\ -0.180850u^{77} + 0.890365u^{76} + \cdots - 11.7000u - 1.33932 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.963362u^{77} + 3.15022u^{76} + \cdots - 117.362u - 14.6971 \\ -0.255022u^{77} + 0.791044u^{76} + \cdots - 5.96319u + 0.0156746 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.580789u^{77} + 1.58696u^{76} + \cdots - 51.0047u - 13.6034 \\ 0.323044u^{77} - 1.22096u^{76} + \cdots - 4.39700u + 0.102187 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.25538u^{77} + 3.66967u^{76} + \cdots - 115.076u - 14.3275 \\ -0.0438473u^{77} + 0.659953u^{76} + \cdots - 4.39108u + 0.00274049 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.66912u^{77} - 5.04900u^{76} + \cdots + 142.099u + 20.3371 \\ -0.229652u^{77} + 0.323047u^{76} + \cdots + 9.44012u + 0.185234 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.66912u^{77} - 5.04900u^{76} + \cdots + 142.099u + 20.3371 \\ -0.229652u^{77} + 0.323047u^{76} + \cdots + 9.44012u + 0.185234 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.440746u^{77} + 0.132996u^{76} + \cdots + 82.1887u + 8.36358$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{78} + 3u^{77} + \cdots - 10u + 1$
c_2	$u^{78} + 27u^{77} + \cdots - 82u + 1$
c_3, c_7	$u^{78} + u^{77} + \cdots + 658u + 59$
c_4, c_9	$u^{78} + u^{77} + \cdots - 2u + 1$
c_6	$u^{78} + 10u^{77} + \cdots + 194051u + 23683$
c_8, c_{11}	$u^{78} - 4u^{77} + \cdots - 1235u + 271$
c_{10}	$u^{78} - 2u^{77} + \cdots - 34703u + 4663$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{78} - 27y^{77} + \cdots + 82y + 1$
c_2	$y^{78} + 57y^{77} + \cdots + 3662y + 1$
c_3, c_7	$y^{78} + 73y^{77} + \cdots - 596276y + 3481$
c_4, c_9	$y^{78} - 59y^{77} + \cdots - 128y + 1$
c_6	$y^{78} - 36y^{77} + \cdots - 17292910371y + 560884489$
c_8, c_{11}	$y^{78} + 60y^{77} + \cdots - 1616823y + 73441$
c_{10}	$y^{78} - 32y^{77} + \cdots - 28280283y + 21743569$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.919382 + 0.415096I$ $a = -0.319202 - 0.766497I$ $b = 0.705973 - 0.119570I$	$-1.84172 - 1.54832I$	0
$u = 0.919382 - 0.415096I$ $a = -0.319202 + 0.766497I$ $b = 0.705973 + 0.119570I$	$-1.84172 + 1.54832I$	0
$u = 0.651027 + 0.778881I$ $a = 0.651319 - 0.808354I$ $b = 0.351881 - 0.133943I$	$6.48100 - 3.09388I$	0
$u = 0.651027 - 0.778881I$ $a = 0.651319 + 0.808354I$ $b = 0.351881 + 0.133943I$	$6.48100 + 3.09388I$	0
$u = 0.980487 + 0.091787I$ $a = -0.786643 + 0.077505I$ $b = -0.441029 - 0.187587I$	$-1.67404 - 0.08608I$	0
$u = 0.980487 - 0.091787I$ $a = -0.786643 - 0.077505I$ $b = -0.441029 + 0.187587I$	$-1.67404 + 0.08608I$	0
$u = -0.510641 + 0.879678I$ $a = -0.07433 + 1.43681I$ $b = -0.084266 - 1.336750I$	$7.01017 + 0.55763I$	0
$u = -0.510641 - 0.879678I$ $a = -0.07433 - 1.43681I$ $b = -0.084266 + 1.336750I$	$7.01017 - 0.55763I$	0
$u = -0.683117 + 0.756267I$ $a = 0.68410 + 2.40034I$ $b = -0.175954 - 1.224060I$	$6.61578 - 3.90393I$	0
$u = -0.683117 - 0.756267I$ $a = 0.68410 - 2.40034I$ $b = -0.175954 + 1.224060I$	$6.61578 + 3.90393I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.912558+0.348343I$ $a=\ \ 0.947042+0.537303I$ $b=\ \ 0.787513-0.609067I$	$-2.10532+3.54417I$	0
$u=-0.912558-0.348343I$ $a=\ \ 0.947042-0.537303I$ $b=\ \ 0.787513+0.609067I$	$-2.10532-3.54417I$	0
$u=-0.854307+0.613428I$ $a=-0.502806-0.147246I$ $b=-0.520280-0.175145I$	$2.08259+2.42309I$	0
$u=-0.854307-0.613428I$ $a=-0.502806+0.147246I$ $b=-0.520280+0.175145I$	$2.08259-2.42309I$	0
$u=\ \ 0.785103+0.701110I$ $a=\ \ 0.29828+1.88835I$ $b=\ \ 0.165797-1.365190I$	$10.31720+0.07253I$	0
$u=\ \ 0.785103-0.701110I$ $a=\ \ 0.29828-1.88835I$ $b=\ \ 0.165797+1.365190I$	$10.31720-0.07253I$	0
$u=-1.051310+0.134686I$ $a=-0.534104+0.782333I$ $b=-0.661388-0.288377I$	$1.42489+4.47911I$	0
$u=-1.051310-0.134686I$ $a=-0.534104-0.782333I$ $b=-0.661388+0.288377I$	$1.42489-4.47911I$	0
$u=\ \ 0.823137+0.670951I$ $a=-1.04974+1.76751I$ $b=\ \ 0.110492-1.219630I$	$2.31988+0.18759I$	0
$u=\ \ 0.823137-0.670951I$ $a=-1.04974-1.76751I$ $b=\ \ 0.110492+1.219630I$	$2.31988-0.18759I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.625258+0.864565I$ $a=-0.58964-1.50488I$ $b=\ \ 0.43046+1.58093I$	$8.01275-4.37942I$	0
$u=-0.625258-0.864565I$ $a=-0.58964+1.50488I$ $b=\ \ 0.43046-1.58093I$	$8.01275+4.37942I$	0
$u=\ \ 0.721996+0.787512I$ $a=\ \ 0.391090+0.643123I$ $b=-1.205930+0.306716I$	$7.57591+4.18168I$	0
$u=\ \ 0.721996-0.787512I$ $a=\ \ 0.391090-0.643123I$ $b=-1.205930-0.306716I$	$7.57591-4.18168I$	0
$u=-0.646393+0.857994I$ $a=-0.57056-1.86291I$ $b=-0.330634+1.210310I$	$6.63045+2.08529I$	0
$u=-0.646393-0.857994I$ $a=-0.57056+1.86291I$ $b=-0.330634-1.210310I$	$6.63045-2.08529I$	0
$u=\ \ 1.091450+0.073360I$ $a=-0.785955+0.496692I$ $b=-0.428556-1.064990I$	$0.82847-3.56102I$	0
$u=\ \ 1.091450-0.073360I$ $a=-0.785955-0.496692I$ $b=-0.428556+1.064990I$	$0.82847+3.56102I$	0
$u=-0.900766+0.062670I$ $a=\ \ 0.07406+1.84676I$ $b=-0.241501+1.105310I$	$6.20657-0.98958I$	$-60.902681+0.10I$
$u=-0.900766-0.062670I$ $a=\ \ 0.07406-1.84676I$ $b=-0.241501-1.105310I$	$6.20657+0.98958I$	$-60.902681+0.10I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.796237 + 0.760422I$ $a = 0.738120 - 1.145030I$ $b = -0.63396 + 1.61284I$	$11.42440 - 2.49625I$	0
$u = 0.796237 - 0.760422I$ $a = 0.738120 + 1.145030I$ $b = -0.63396 - 1.61284I$	$11.42440 + 2.49625I$	0
$u = -0.867555 + 0.688655I$ $a = -0.353143 + 0.969190I$ $b = 1.57794 + 0.12915I$	$1.69309 + 2.65199I$	0
$u = -0.867555 - 0.688655I$ $a = -0.353143 - 0.969190I$ $b = 1.57794 - 0.12915I$	$1.69309 - 2.65199I$	0
$u = 0.897871 + 0.675237I$ $a = 0.98099 - 2.00046I$ $b = 0.327853 + 1.299700I$	$2.08862 - 5.40076I$	0
$u = 0.897871 - 0.675237I$ $a = 0.98099 + 2.00046I$ $b = 0.327853 - 1.299700I$	$2.08862 + 5.40076I$	0
$u = -0.471260 + 0.715322I$ $a = 0.367913 + 0.003194I$ $b = -0.577762 + 0.019556I$	$3.10549 - 1.21428I$	$-6 - 0.932552 + 0.10I$
$u = -0.471260 - 0.715322I$ $a = 0.367913 - 0.003194I$ $b = -0.577762 - 0.019556I$	$3.10549 + 1.21428I$	$-6 - 0.932552 + 0.10I$
$u = 0.934384 + 0.682083I$ $a = 2.19405 - 1.31253I$ $b = 0.209204 + 1.238200I$	$9.85296 - 5.39790I$	0
$u = 0.934384 - 0.682083I$ $a = 2.19405 + 1.31253I$ $b = 0.209204 - 1.238200I$	$9.85296 + 5.39790I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.806544+0.123097I$ $a=\ 0.539789+0.141829I$ $b=\ 0.637200+0.917242I$	$-1.17381-1.68388I$	$0.83726-6.01771I$
$u=-0.806544-0.123097I$ $a=\ 0.539789-0.141829I$ $b=\ 0.637200-0.917242I$	$-1.17381+1.68388I$	$0.83726+6.01771I$
$u=\ 0.940160+0.729085I$ $a=-1.30654+1.57774I$ $b=-0.76597-1.46965I$	$10.98100-3.15371I$	0
$u=\ 0.940160-0.729085I$ $a=-1.30654-1.57774I$ $b=-0.76597+1.46965I$	$10.98100+3.15371I$	0
$u=\ 0.785464+0.142913I$ $a=\ 0.62353-1.64939I$ $b=\ 0.831715+0.510792I$	$-1.32910-0.60787I$	$-3.50485-2.67829I$
$u=\ 0.785464-0.142913I$ $a=\ 0.62353+1.64939I$ $b=\ 0.831715-0.510792I$	$-1.32910+0.60787I$	$-3.50485+2.67829I$
$u=-1.053060+0.586459I$ $a=-0.023473-0.712350I$ $b=-0.590557+0.019641I$	$1.39270+6.19483I$	0
$u=-1.053060-0.586459I$ $a=-0.023473+0.712350I$ $b=-0.590557-0.019641I$	$1.39270-6.19483I$	0
$u=\ 0.650281+1.026430I$ $a=\ 0.39794-1.45251I$ $b=-0.44162+1.48170I$	$13.3117+9.8514I$	0
$u=\ 0.650281-1.026430I$ $a=\ 0.39794+1.45251I$ $b=-0.44162-1.48170I$	$13.3117-9.8514I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.003170+0.699177I$ $a=-1.20363-2.06396I$ $b=-0.276298+1.317430I$	$5.65322+9.45248I$	0
$u=-1.003170-0.699177I$ $a=-1.20363+2.06396I$ $b=-0.276298-1.317430I$	$5.65322-9.45248I$	0
$u=0.991949+0.723933I$ $a=0.029164+0.815832I$ $b=-1.324200-0.107360I$	$6.75517-9.89412I$	0
$u=0.991949-0.723933I$ $a=0.029164-0.815832I$ $b=-1.324200+0.107360I$	$6.75517+9.89412I$	0
$u=1.224710+0.112853I$ $a=0.237600+0.305151I$ $b=0.268395+1.179100I$	$1.03395-3.16868I$	0
$u=1.224710-0.112853I$ $a=0.237600-0.305151I$ $b=0.268395-1.179100I$	$1.03395+3.16868I$	0
$u=1.025600+0.727427I$ $a=0.186084+0.163814I$ $b=0.616269-0.163910I$	$5.36964-2.62564I$	0
$u=1.025600-0.727427I$ $a=0.186084-0.163814I$ $b=0.616269+0.163910I$	$5.36964+2.62564I$	0
$u=-1.058580+0.726505I$ $a=1.27853+1.47897I$ $b=0.60139-1.55104I$	$6.70371+10.29660I$	0
$u=-1.058580-0.726505I$ $a=1.27853-1.47897I$ $b=0.60139+1.55104I$	$6.70371-10.29660I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.040720+0.774309I$ $a=\ \ 0.70860+1.25362I$ $b=-0.097731-1.271840I$	$5.46363+3.99334I$	0
$u=-1.040720-0.774309I$ $a=\ \ 0.70860-1.25362I$ $b=-0.097731+1.271840I$	$5.46363-3.99334I$	0
$u=-1.098500+0.730187I$ $a=-1.24857-1.08059I$ $b=-0.254548+1.221860I$	$5.29888+5.39356I$	0
$u=-1.098500-0.730187I$ $a=-1.24857+1.08059I$ $b=-0.254548-1.221860I$	$5.29888-5.39356I$	0
$u=\ \ 1.115900+0.788410I$ $a=-1.18485+1.48176I$ $b=-0.55541-1.48099I$	$11.8295-16.4283I$	0
$u=\ \ 1.115900-0.788410I$ $a=-1.18485-1.48176I$ $b=-0.55541+1.48099I$	$11.8295+16.4283I$	0
$u=\ \ 0.45896+1.35957I$ $a=-0.065261+1.254430I$ $b=\ \ 0.046387-1.281840I$	$10.84600-2.03461I$	0
$u=\ \ 0.45896-1.35957I$ $a=-0.065261-1.254430I$ $b=\ \ 0.046387+1.281840I$	$10.84600+2.03461I$	0
$u=-1.43030+0.30968I$ $a=-0.462230-0.259484I$ $b=-0.251800+1.189590I$	$4.19571+7.76962I$	0
$u=-1.43030-0.30968I$ $a=-0.462230+0.259484I$ $b=-0.251800-1.189590I$	$4.19571-7.76962I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.489302+0.114434I$ $a=-1.24057+1.69081I$ $b=-0.11108-1.50372I$	$7.78823+1.62906I$	$-3.05008-4.47531I$
$u=-0.489302-0.114434I$ $a=-1.24057-1.69081I$ $b=-0.11108+1.50372I$	$7.78823-1.62906I$	$-3.05008+4.47531I$
$u=1.24794+0.95730I$ $a=0.717195-1.121420I$ $b=0.280618+1.201350I$	$8.51017-5.96874I$	0
$u=1.24794-0.95730I$ $a=0.717195+1.121420I$ $b=0.280618-1.201350I$	$8.51017+5.96874I$	0
$u=0.013339+0.320104I$ $a=-1.39879-0.45191I$ $b=0.373310+0.454562I$	$-0.078062-1.100560I$	$-1.42175+6.23894I$
$u=0.013339-0.320104I$ $a=-1.39879+0.45191I$ $b=0.373310-0.454562I$	$-0.078062+1.100560I$	$-1.42175-6.23894I$
$u=-0.0520369+0.1011840I$ $a=-15.3453+3.5674I$ $b=-0.351925-0.721276I$	$5.14575-3.44483I$	$3.90868+8.31277I$
$u=-0.0520369-0.1011840I$ $a=-15.3453-3.5674I$ $b=-0.351925+0.721276I$	$5.14575+3.44483I$	$3.90868-8.31277I$

II. $I_2^u =$
$\langle -2u^{17}-2u^{16}+\cdots+b-3,\ -4u^{17}-5u^{16}+\cdots+a-3,\ u^{18}+2u^{17}+\cdots+2u+1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-u^2+1\\u^2\end{pmatrix}$$
$$a_6 = \begin{pmatrix}-u\\-u^3+u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}4u^{17}+5u^{16}+\cdots+3u+3\\2u^{17}+2u^{16}+\cdots+5u+3\end{pmatrix}$$
$$a_7 = \begin{pmatrix}3u^{17}+3u^{16}+\cdots+3u+1\\2u^{17}+2u^{16}+\cdots+6u+3\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}3u^{17}+6u^{16}+\cdots+4u+8\\-2u^{17}-4u^{16}+\cdots+9u^2-1\end{pmatrix}$$
$$a_9 = \begin{pmatrix}u^{17}-3u^{15}+\cdots+9u^2-4\\-u^{16}-3u^{15}+\cdots+4u+3\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}4u^{17}+7u^{16}+\cdots+3u+6\\-u^{17}-2u^{16}+\cdots+2u+2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}2u^{17}+4u^{16}+\cdots-13u^2+5\\-u^{17}+4u^{15}+\cdots-u+2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}2u^{17}+4u^{16}+\cdots-13u^2+5\\-u^{17}+4u^{15}+\cdots-u+2\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4u^{17}+12u^{16}+7u^{15}-17u^{14}-12u^{13}+41u^{12}+54u^{11}-33u^{10}-85u^9+12u^8+97u^7-u^6-90u^5-6u^4+70u^3+18u^2-28u-16$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18}+2u^{17}+\cdots+2u+1$
c_2	$u^{18}+8u^{17}+\cdots+8u+1$
c_3	$u^{18}+10u^{16}+\cdots-6u+1$
c_4	$u^{18}-6u^{16}+\cdots+9u^2+1$
c_5	$u^{18}-2u^{17}+\cdots-2u+1$
c_6	$u^{18}+3u^{17}+\cdots+7u+1$
c_7	$u^{18}+10u^{16}+\cdots+6u+1$
c_8	$u^{18}-3u^{17}+\cdots-3u+1$
c_9	$u^{18}-6u^{16}+\cdots+9u^2+1$
c_{10}	$u^{18}+u^{17}+\cdots+u+1$
c_{11}	$u^{18}+3u^{17}+\cdots+3u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{18} - 8y^{17} + \cdots - 8y + 1$
c_2	$y^{18} + 12y^{17} + \cdots + 8y + 1$
c_3, c_7	$y^{18} + 20y^{17} + \cdots + 2y + 1$
c_4, c_9	$y^{18} - 12y^{17} + \cdots + 18y + 1$
c_6	$y^{18} - 5y^{17} + \cdots - 17y + 1$
c_8, c_{11}	$y^{18} + 11y^{17} + \cdots + 7y + 1$
c_{10}	$y^{18} - 5y^{17} + \cdots - 9y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.600980 + 0.789755I$ $a = -0.005827 + 0.968886I$ $b = 0.244466 - 1.282710I$	$9.11732 - 1.68939I$	$4.72142 + 2.78192I$
$u = 0.600980 - 0.789755I$ $a = -0.005827 - 0.968886I$ $b = 0.244466 + 1.282710I$	$9.11732 + 1.68939I$	$4.72142 - 2.78192I$
$u = 0.882213 + 0.342814I$ $a = 0.473394 + 1.217710I$ $b = -0.686177 - 0.146117I$	$-1.03138 - 1.46977I$	$0.74998 + 4.28225I$
$u = 0.882213 - 0.342814I$ $a = 0.473394 - 1.217710I$ $b = -0.686177 + 0.146117I$	$-1.03138 + 1.46977I$	$0.74998 - 4.28225I$
$u = -0.867359 + 0.630592I$ $a = -0.069787 - 0.673710I$ $b = -1.169260 - 0.096853I$	$0.76282 + 2.46662I$	$-3.87434 - 2.61953I$
$u = -0.867359 - 0.630592I$ $a = -0.069787 + 0.673710I$ $b = -1.169260 + 0.096853I$	$0.76282 - 2.46662I$	$-3.87434 + 2.61953I$
$u = 0.878300 + 0.073533I$ $a = -0.610367 + 0.158854I$ $b = -0.545461 - 0.836793I$	$-1.39353 - 2.18547I$	$-5.73139 + 7.17501I$
$u = 0.878300 - 0.073533I$ $a = -0.610367 - 0.158854I$ $b = -0.545461 + 0.836793I$	$-1.39353 + 2.18547I$	$-5.73139 - 7.17501I$
$u = -1.141810 + 0.444651I$ $a = -0.300052 + 0.568408I$ $b = 0.123838 - 0.630055I$	$2.86239 + 5.92628I$	$1.35739 - 5.49734I$
$u = -1.141810 - 0.444651I$ $a = -0.300052 - 0.568408I$ $b = 0.123838 + 0.630055I$	$2.86239 - 5.92628I$	$1.35739 + 5.49734I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.963245 + 0.833701I$ $a = 1.17457 - 1.26015I$ $b = 0.342226 + 1.036720I$	$8.06866 - 4.51985I$	$3.88251 + 3.07468I$
$u = 0.963245 - 0.833701I$ $a = 1.17457 + 1.26015I$ $b = 0.342226 - 1.036720I$	$8.06866 + 4.51985I$	$3.88251 - 3.07468I$
$u = -0.667472 + 0.285364I$ $a = -1.11513 + 2.54893I$ $b = 0.325026 + 0.632338I$	$4.80242 - 2.81861I$	$-1.84387 - 0.52056I$
$u = -0.667472 - 0.285364I$ $a = -1.11513 - 2.54893I$ $b = 0.325026 - 0.632338I$	$4.80242 + 2.81861I$	$-1.84387 + 0.52056I$
$u = -0.482522 + 0.541462I$ $a = -0.41220 + 2.30716I$ $b = 0.04482 - 1.43171I$	$8.48319 - 0.98511I$	$5.24254 - 0.71087I$
$u = -0.482522 - 0.541462I$ $a = -0.41220 - 2.30716I$ $b = 0.04482 + 1.43171I$	$8.48319 + 0.98511I$	$5.24254 + 0.71087I$
$u = -1.165580 + 0.721113I$ $a = -1.13459 - 1.06778I$ $b = -0.179481 + 1.292250I$	$6.16158 + 6.28946I$	$3.99576 - 6.33325I$
$u = -1.165580 - 0.721113I$ $a = -1.13459 + 1.06778I$ $b = -0.179481 - 1.292250I$	$6.16158 - 6.28946I$	$3.99576 + 6.33325I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}+2u^{17}+\cdots+2u+1)(u^{78}+3u^{77}+\cdots-10u+1)$
c_2	$(u^{18}+8u^{17}+\cdots+8u+1)(u^{78}+27u^{77}+\cdots-82u+1)$
c_3	$(u^{18}+10u^{16}+\cdots-6u+1)(u^{78}+u^{77}+\cdots+658u+59)$
c_4	$(u^{18}-6u^{16}+\cdots+9u^2+1)(u^{78}+u^{77}+\cdots-2u+1)$
c_5	$(u^{18}-2u^{17}+\cdots-2u+1)(u^{78}+3u^{77}+\cdots-10u+1)$
c_6	$(u^{18}+3u^{17}+\cdots+7u+1)(u^{78}+10u^{77}+\cdots+194051u+23683)$
c_7	$(u^{18}+10u^{16}+\cdots+6u+1)(u^{78}+u^{77}+\cdots+658u+59)$
c_8	$(u^{18}-3u^{17}+\cdots-3u+1)(u^{78}-4u^{77}+\cdots-1235u+271)$
c_9	$(u^{18}-6u^{16}+\cdots+9u^2+1)(u^{78}+u^{77}+\cdots-2u+1)$
c_{10}	$(u^{18}+u^{17}+\cdots+u+1)(u^{78}-2u^{77}+\cdots-34703u+4663)$
c_{11}	$(u^{18}+3u^{17}+\cdots+3u+1)(u^{78}-4u^{77}+\cdots-1235u+271)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{18} - 8y^{17} + \cdots - 8y + 1)(y^{78} - 27y^{77} + \cdots + 82y + 1)$
c_2	$(y^{18} + 12y^{17} + \cdots + 8y + 1)(y^{78} + 57y^{77} + \cdots + 3662y + 1)$
c_3, c_7	$(y^{18} + 20y^{17} + \cdots + 2y + 1)(y^{78} + 73y^{77} + \cdots - 596276y + 3481)$
c_4, c_9	$(y^{18} - 12y^{17} + \cdots + 18y + 1)(y^{78} - 59y^{77} + \cdots - 128y + 1)$
c_6	$(y^{18} - 5y^{17} + \cdots - 17y + 1)$ $\cdot (y^{78} - 36y^{77} + \cdots - 17292910371y + 560884489)$
c_8, c_{11}	$(y^{18} + 11y^{17} + \cdots + 7y + 1)(y^{78} + 60y^{77} + \cdots - 1616823y + 73441)$
c_{10}	$(y^{18} - 5y^{17} + \cdots - 9y + 1)$ $\cdot (y^{78} - 32y^{77} + \cdots - 28280283y + 21743569)$