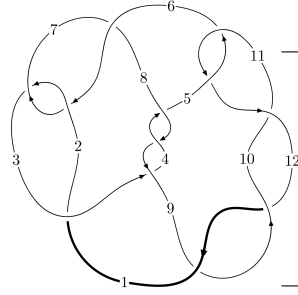
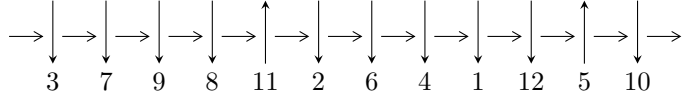


12a₀₅₅₇ (K12a₀₅₅₇)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 1.49508 \times 10^{98} u^{64} + 3.45396 \times 10^{98} u^{63} + \dots + 1.71880 \times 10^{101} b - 6.24196 \times 10^{100}, \\ 7.40968 \times 10^{98} u^{64} + 4.71743 \times 10^{98} u^{63} + \dots + 1.56255 \times 10^{100} a + 4.47963 \times 10^{99}, u^{65} + u^{64} + \dots - 25u - 2 \rangle$$

$$I_2^u = \langle -13687a^5 u - 12349a^4 u + \dots - 16925a + 1043, \\ a^6 + 2a^5 u - a^4 u - 4a^4 - 7a^3 u + 6a^3 + 8a^2 u + 6a^2 - 4au - 11a - u + 6, u^2 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 77 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.

$$\mathbf{I. } I_1^u = \langle 1.50 \times 10^{98} u^{64} + 3.45 \times 10^{98} u^{63} + \dots + 1.72 \times 10^{101} b - 6.24 \times 10^{100}, 7.41 \times 10^{98} u^{64} + 4.72 \times 10^{98} u^{63} + \dots + 1.56 \times 10^{100} a + 4.48 \times 10^{99}, u^{65} + u^{64} + \dots - 25u - 25 \rangle$$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_9 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0474205u^{64} - 0.0301906u^{63} + \dots + 7.10316u - 0.286687 \\ -0.000869840u^{64} - 0.00200952u^{63} + \dots - 0.135624u + 0.363158 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.0465507u^{64} - 0.0281811u^{63} + \dots + 7.23878u - 0.649845 \\ -0.000869840u^{64} - 0.00200952u^{63} + \dots - 0.135624u + 0.363158 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0150022u^{64} + 0.0129683u^{63} + \dots + 2.59978u - 2.71871 \\ -0.00372994u^{64} - 0.00195650u^{63} + \dots + 1.02293u + 0.756420 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0176087u^{64} - 0.0141154u^{63} + \dots + 6.93497u - 1.17013 \\ -0.00433770u^{64} - 0.0109885u^{63} + \dots - 0.534815u + 0.289329 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0346066u^{64} + 0.0170099u^{63} + \dots - 6.02149u + 0.689262 \\ -0.00352626u^{64} - 0.00697665u^{63} + \dots + 1.54019u + 0.392222 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0317390u^{64} - 0.0250886u^{63} + \dots + 1.23774u - 0.670406 \\ -0.00724756u^{64} - 0.0123758u^{63} + \dots + 1.06301u + 0.201180 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.0299964u^{64} - 0.0121632u^{63} + \dots + 3.39288u - 0.548318 \\ 0.00192211u^{64} - 0.00142328u^{63} + \dots - 1.37640u - 0.164022 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $0.0739830u^{64} + 0.0434787u^{63} + \dots + 8.13540u - 8.87805$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^{65} + 19u^{64} + \dots + 5u + 1$
c_2, c_6	$u^{65} - u^{64} + \dots + 3u + 1$
c_3, c_4, c_8	$u^{65} - u^{64} + \dots - 25u + 25$
c_5, c_{11}	$u^{65} + u^{64} + \dots - 5u + 1$
c_9, c_{10}, c_{12}	$u^{65} + 15u^{64} + \dots + 7u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^{65} + 61y^{64} + \dots - 107y - 1$
c_2, c_6	$y^{65} - 19y^{64} + \dots + 5y - 1$
c_3, c_4, c_8	$y^{65} + 71y^{64} + \dots - 7625y - 625$
c_5, c_{11}	$y^{65} + 15y^{64} + \dots + 7y - 1$
c_9, c_{10}, c_{12}	$y^{65} + 75y^{64} + \dots - 101y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.194939 + 0.985568I$	$4.66678 - 3.00289I$	$-8.00000 + 0.I$
$a = 1.136230 - 0.286521I$		
$b = 0.757307 - 0.912410I$		
$u = -0.194939 - 0.985568I$	$4.66678 + 3.00289I$	$-8.00000 + 0.I$
$a = 1.136230 + 0.286521I$		
$b = 0.757307 + 0.912410I$		
$u = 0.143383 + 0.948907I$	$1.78080 - 2.10362I$	$0. + 4.48623I$
$a = -0.264910 - 0.796535I$		
$b = -0.235093 + 0.116598I$		
$u = 0.143383 - 0.948907I$	$1.78080 + 2.10362I$	$0. - 4.48623I$
$a = -0.264910 + 0.796535I$		
$b = -0.235093 - 0.116598I$		
$u = 0.221402 + 0.901501I$	$4.84956 - 2.80174I$	$-1.96434 + 4.08273I$
$a = 1.47954 - 0.11084I$		
$b = 0.781778 - 0.855158I$		
$u = 0.221402 - 0.901501I$	$4.84956 + 2.80174I$	$-1.96434 - 4.08273I$
$a = 1.47954 + 0.11084I$		
$b = 0.781778 + 0.855158I$		
$u = -0.444661 + 0.777234I$	$2.38441 - 2.58306I$	$-3.08948 + 3.45648I$
$a = 0.408200 - 0.203744I$		
$b = -0.506414 + 0.612963I$		
$u = -0.444661 - 0.777234I$	$2.38441 + 2.58306I$	$-3.08948 - 3.45648I$
$a = 0.408200 + 0.203744I$		
$b = -0.506414 - 0.612963I$		
$u = -0.200493 + 1.105690I$	$-0.456321 + 0.587854I$	0
$a = 0.077851 - 0.634026I$		
$b = -0.156729 + 0.869731I$		
$u = -0.200493 - 1.105690I$	$-0.456321 - 0.587854I$	0
$a = 0.077851 + 0.634026I$		
$b = -0.156729 - 0.869731I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.540784 + 0.670619I$ $a = -0.252084 - 0.024836I$ $b = 0.558240 + 0.478764I$	$2.54249 - 2.69464I$	$-2.33919 + 3.35970I$
$u = 0.540784 - 0.670619I$ $a = -0.252084 + 0.024836I$ $b = 0.558240 - 0.478764I$	$2.54249 + 2.69464I$	$-2.33919 - 3.35970I$
$u = -0.991125 + 0.561749I$ $a = -1.220950 + 0.689343I$ $b = -0.863665 - 0.958398I$	$9.74563 + 9.54545I$	0
$u = -0.991125 - 0.561749I$ $a = -1.220950 - 0.689343I$ $b = -0.863665 + 0.958398I$	$9.74563 - 9.54545I$	0
$u = 0.973757 + 0.615749I$ $a = -0.383570 - 0.233418I$ $b = -0.896873 - 0.885529I$	$9.97887 - 3.03863I$	0
$u = 0.973757 - 0.615749I$ $a = -0.383570 + 0.233418I$ $b = -0.896873 + 0.885529I$	$9.97887 + 3.03863I$	0
$u = 0.947294 + 0.674719I$ $a = 1.243340 + 0.582206I$ $b = 0.874408 - 0.938153I$	$10.15870 - 3.31862I$	0
$u = 0.947294 - 0.674719I$ $a = 1.243340 - 0.582206I$ $b = 0.874408 + 0.938153I$	$10.15870 + 3.31862I$	0
$u = -0.925321 + 0.731778I$ $a = 0.465765 - 0.237270I$ $b = 0.887478 - 0.908982I$	$10.25190 - 3.19464I$	0
$u = -0.925321 - 0.731778I$ $a = 0.465765 + 0.237270I$ $b = 0.887478 + 0.908982I$	$10.25190 + 3.19464I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.666201 + 0.415426I$ $a = 0.53075 - 1.62998I$ $b = 0.470202 + 0.892585I$	$1.24733 + 6.64277I$	$-7.43550 - 9.53298I$
$u = -0.666201 - 0.415426I$ $a = 0.53075 + 1.62998I$ $b = 0.470202 - 0.892585I$	$1.24733 - 6.64277I$	$-7.43550 + 9.53298I$
$u = -0.037730 + 1.240550I$ $a = -1.51164 - 0.80363I$ $b = -0.426053 - 0.548434I$	$2.00616 - 1.49123I$	0
$u = -0.037730 - 1.240550I$ $a = -1.51164 + 0.80363I$ $b = -0.426053 + 0.548434I$	$2.00616 + 1.49123I$	0
$u = 0.117997 + 1.274100I$ $a = 1.40404 - 0.21152I$ $b = 0.612078 - 0.723737I$	$4.41355 - 2.28333I$	0
$u = 0.117997 - 1.274100I$ $a = 1.40404 + 0.21152I$ $b = 0.612078 + 0.723737I$	$4.41355 + 2.28333I$	0
$u = 0.574683 + 0.420836I$ $a = -0.34710 - 1.45942I$ $b = -0.499917 + 0.810111I$	$1.75044 - 1.32012I$	$-5.66585 + 3.92029I$
$u = 0.574683 - 0.420836I$ $a = -0.34710 + 1.45942I$ $b = -0.499917 - 0.810111I$	$1.75044 + 1.32012I$	$-5.66585 - 3.92029I$
$u = -0.165173 + 1.283860I$ $a = -1.78999 + 0.19957I$ $b = -0.424688 - 0.860379I$	$0.95184 + 4.92361I$	0
$u = -0.165173 - 1.283860I$ $a = -1.78999 - 0.19957I$ $b = -0.424688 + 0.860379I$	$0.95184 - 4.92361I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.572720 + 0.106229I$		
$a = 0.96365 - 1.74351I$	$-3.34907 + 2.30473I$	$-16.2162 - 5.9449I$
$b = 0.262020 + 0.873062I$		
$u = -0.572720 - 0.106229I$		
$a = 0.96365 + 1.74351I$	$-3.34907 - 2.30473I$	$-16.2162 + 5.9449I$
$b = 0.262020 - 0.873062I$		
$u = -0.437487 + 0.332448I$		
$a = -2.32984 + 0.82322I$	$2.66558 + 5.57488I$	$-9.42845 - 7.52087I$
$b = -0.784409 - 0.913662I$		
$u = -0.437487 - 0.332448I$		
$a = -2.32984 - 0.82322I$	$2.66558 - 5.57488I$	$-9.42845 + 7.52087I$
$b = -0.784409 + 0.913662I$		
$u = -0.04732 + 1.49280I$		
$a = 0.003876 - 0.697847I$	$4.94320 + 3.00427I$	0
$b = -0.024391 + 1.094580I$		
$u = -0.04732 - 1.49280I$		
$a = 0.003876 + 0.697847I$	$4.94320 - 3.00427I$	0
$b = -0.024391 - 1.094580I$		
$u = -0.13405 + 1.51695I$		
$a = 2.18073 + 0.49322I$	$8.98795 + 7.60409I$	0
$b = 0.859141 + 0.947236I$		
$u = -0.13405 - 1.51695I$		
$a = 2.18073 - 0.49322I$	$8.98795 - 7.60409I$	0
$b = 0.859141 - 0.947236I$		
$u = 0.09167 + 1.52042I$		
$a = 1.60247 + 1.13624I$	$9.16830 - 1.15187I$	0
$b = 0.883757 + 0.890653I$		
$u = 0.09167 - 1.52042I$		
$a = 1.60247 - 1.13624I$	$9.16830 + 1.15187I$	0
$b = 0.883757 - 0.890653I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.353629 + 0.307016I$ $a = -0.21266 - 1.52151I$ $b = -0.789122 - 0.859153I$	$2.82730 + 0.34334I$	$-9.08497 + 2.02539I$
$u = 0.353629 - 0.307016I$ $a = -0.21266 + 1.52151I$ $b = -0.789122 + 0.859153I$	$2.82730 - 0.34334I$	$-9.08497 - 2.02539I$
$u = 0.13146 + 1.52657I$ $a = 1.221890 + 0.412179I$ $b = 0.516210 - 1.047730I$	$8.27904 - 3.65206I$	0
$u = 0.13146 - 1.52657I$ $a = 1.221890 - 0.412179I$ $b = 0.516210 + 1.047730I$	$8.27904 + 3.65206I$	0
$u = -0.21085 + 1.52413I$ $a = -1.252790 + 0.515874I$ $b = -0.473206 - 1.059010I$	$7.69875 + 9.80033I$	0
$u = -0.21085 - 1.52413I$ $a = -1.252790 - 0.515874I$ $b = -0.473206 + 1.059010I$	$7.69875 - 9.80033I$	0
$u = 0.455205$ $a = -0.0293311$ $b = 0.404527$	-1.07813	-9.13920
$u = 0.14198 + 1.58601I$ $a = -0.829734 - 0.378431I$ $b = -0.825125 - 0.320393I$	$10.16130 - 5.11867I$	0
$u = 0.14198 - 1.58601I$ $a = -0.829734 + 0.378431I$ $b = -0.825125 + 0.320393I$	$10.16130 + 5.11867I$	0
$u = -0.05580 + 1.59350I$ $a = 0.883115 - 0.344042I$ $b = 0.829266 - 0.381772I$	$10.48610 - 1.22570I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.05580 - 1.59350I$ $a = 0.883115 + 0.344042I$ $b = 0.829266 + 0.381772I$	$10.48610 + 1.22570I$	0
$u = 0.265152 + 0.297533I$ $a = -1.128460 - 0.499441I$ $b = -0.222502 + 0.644711I$	$-0.359965 - 0.971629I$	$-6.26553 + 6.85953I$
$u = 0.265152 - 0.297533I$ $a = -1.128460 + 0.499441I$ $b = -0.222502 - 0.644711I$	$-0.359965 + 0.971629I$	$-6.26553 - 6.85953I$
$u = 0.02254 + 1.60792I$ $a = -1.73396 + 0.67808I$ $b = -0.893399 + 0.929362I$	$13.28270 - 3.29649I$	0
$u = 0.02254 - 1.60792I$ $a = -1.73396 - 0.67808I$ $b = -0.893399 - 0.929362I$	$13.28270 + 3.29649I$	0
$u = -0.35667 + 1.60371I$ $a = 1.91240 - 0.16841I$ $b = 0.857112 + 1.009490I$	$16.7892 + 14.5383I$	0
$u = -0.35667 - 1.60371I$ $a = 1.91240 + 0.16841I$ $b = 0.857112 - 1.009490I$	$16.7892 - 14.5383I$	0
$u = 0.33299 + 1.62729I$ $a = 0.916394 + 0.913504I$ $b = 0.942347 + 0.840020I$	$17.3369 - 7.9187I$	0
$u = 0.33299 - 1.62729I$ $a = 0.916394 - 0.913504I$ $b = 0.942347 - 0.840020I$	$17.3369 + 7.9187I$	0
$u = 0.30253 + 1.64433I$ $a = -1.84849 - 0.02882I$ $b = -0.872298 + 1.000890I$	$17.8412 - 8.0089I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.30253 - 1.64433I$ $a = -1.84849 + 0.02882I$ $b = -0.872298 - 1.000890I$	$17.8412 + 8.0089I$	0
$u = -0.27148 + 1.66645I$ $a = -1.042730 + 0.849827I$ $b = -0.944098 + 0.861611I$	$18.2931 + 1.3306I$	0
$u = -0.27148 - 1.66645I$ $a = -1.042730 - 0.849827I$ $b = -0.944098 - 0.861611I$	$18.2931 - 1.3306I$	0
$u = -0.176841 + 0.243173I$ $a = 1.23332 + 4.42124I$ $b = 0.044375 - 0.853831I$	$-1.05566 + 2.24342I$	$-14.4833 - 3.3091I$
$u = -0.176841 - 0.243173I$ $a = 1.23332 - 4.42124I$ $b = 0.044375 + 0.853831I$	$-1.05566 - 2.24342I$	$-14.4833 + 3.3091I$

$$\text{II. } I_2^u = \langle -13687a^5u - 12349a^4u + \cdots - 16925a + 1043, 2a^5u - a^4u + \cdots - 11a + 6, u^2 + 1 \rangle$$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_9 = \begin{pmatrix} -u \\ 0 \end{pmatrix}$$

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

$$a_{12} = \begin{pmatrix} a \\ 0.184498a^5u + 0.166462a^4u + \cdots + 0.228146a - 0.0140594 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.184498a^5u - 0.166462a^4u + \cdots + 0.771854a + 0.0140594 \\ 0.184498a^5u + 0.166462a^4u + \cdots + 0.228146a - 0.0140594 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0408978a^5u + 0.129177a^4u + \cdots + 0.154613a + 0.806484 \\ -0.167972a^5u - 0.213143a^4u + \cdots + 0.380805a + 0.496178 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.0408978a^5u + 0.129177a^4u + \cdots + 0.154613a + 0.806484 \\ -0.182126a^5u - 0.0785469a^4u + \cdots + 0.763025a - 0.786224 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0179551a^5u - 0.0164589a^4u + \cdots + 0.0922693a + 0.329676 \\ -0.0874301a^5u + 0.282847a^4u + \cdots + 1.08674a - 1.08730 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.182126a^5u - 0.0785469a^4u + \cdots + 0.763025a - 0.786224 \\ 0.0791130a^5u + 0.465768a^4u + \cdots + 1.22262a - 1.43103 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0179551a^5u - 0.0164589a^4u + \cdots + 0.0922693a + 0.329676 \\ -0.105385a^5u + 0.299306a^4u + \cdots + 0.994473a - 1.41697 \end{pmatrix}$$

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = \frac{11172}{74185}a^5u - \frac{66884}{74185}a^5 - \frac{88436}{74185}a^4u - \frac{87728}{74185}a^4 - \frac{10956}{14837}a^3u + \frac{31104}{14837}a^3 + \frac{61696}{14837}a^2u - \frac{7576}{14837}a^2 + \frac{22716}{14837}au - \frac{73396}{14837}a + \frac{235144}{74185}u - \frac{192528}{74185}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^2 - u + 1)^6$
c_2, c_6	$(u^4 - u^2 + 1)^3$
c_3, c_4, c_8	$(u^2 + 1)^6$
c_5, c_{11}	$(u^6 + u^4 + 2u^2 + 1)^2$
c_7	$(u^2 + u + 1)^6$
c_9, c_{10}	$(u^3 - u^2 + 2u - 1)^4$
c_{12}	$(u^3 + u^2 + 2u + 1)^4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$(y^2 + y + 1)^6$
c_2, c_6	$(y^2 - y + 1)^6$
c_3, c_4, c_8	$(y + 1)^{12}$
c_5, c_{11}	$(y^3 + y^2 + 2y + 1)^4$
c_9, c_{10}, c_{12}	$(y^3 + 3y^2 + 2y - 1)^4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.000000I$		
$a = 0.662359 + 0.577399I$	$0.53148 - 2.02988I$	$-9.01951 + 3.46410I$
$b = 0.754878I$		
$u = 1.000000I$		
$a = 0.489013 - 0.507560I$	$4.66906 - 4.85801I$	$-2.49024 + 6.44355I$
$b = 0.744862 - 0.877439I$		
$u = 1.000000I$		
$a = -1.15137 - 1.06984I$	$4.66906 + 0.79824I$	$-2.49024 + 0.48465I$
$b = -0.744862 - 0.877439I$		
$u = 1.000000I$		
$a = 1.46291 + 0.63968I$	$4.66906 - 0.79824I$	$-2.49024 - 0.48465I$
$b = 0.744862 - 0.877439I$		
$u = 1.000000I$		
$a = 0.66236 - 1.71708I$	$0.53148 + 2.02988I$	$-9.01951 - 3.46410I$
$b = 0.754878I$		
$u = 1.000000I$		
$a = -2.12527 + 0.07740I$	$4.66906 + 4.85801I$	$-2.49024 - 6.44355I$
$b = -0.744862 - 0.877439I$		
$u = -1.000000I$		
$a = 0.662359 - 0.577399I$	$0.53148 + 2.02988I$	$-9.01951 - 3.46410I$
$b = -0.754878I$		
$u = -1.000000I$		
$a = 0.489013 + 0.507560I$	$4.66906 + 4.85801I$	$-2.49024 - 6.44355I$
$b = 0.744862 + 0.877439I$		
$u = -1.000000I$		
$a = -1.15137 + 1.06984I$	$4.66906 - 0.79824I$	$-2.49024 - 0.48465I$
$b = -0.744862 + 0.877439I$		
$u = -1.000000I$		
$a = 1.46291 - 0.63968I$	$4.66906 + 0.79824I$	$-2.49024 + 0.48465I$
$b = 0.744862 + 0.877439I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.000000I$		
$a = 0.66236 + 1.71708I$	$0.53148 - 2.02988I$	$-9.01951 + 3.46410I$
$b = -0.754878I$		
$u = -1.000000I$		
$a = -2.12527 - 0.07740I$	$4.66906 - 4.85801I$	$-2.49024 + 6.44355I$
$b = -0.744862 + 0.877439I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2 - u + 1)^6)(u^{65} + 19u^{64} + \dots + 5u + 1)$
c_2, c_6	$((u^4 - u^2 + 1)^3)(u^{65} - u^{64} + \dots + 3u + 1)$
c_3, c_4, c_8	$((u^2 + 1)^6)(u^{65} - u^{64} + \dots - 25u + 25)$
c_5, c_{11}	$((u^6 + u^4 + 2u^2 + 1)^2)(u^{65} + u^{64} + \dots - 5u + 1)$
c_7	$((u^2 + u + 1)^6)(u^{65} + 19u^{64} + \dots + 5u + 1)$
c_9, c_{10}	$((u^3 - u^2 + 2u - 1)^4)(u^{65} + 15u^{64} + \dots + 7u - 1)$
c_{12}	$((u^3 + u^2 + 2u + 1)^4)(u^{65} + 15u^{64} + \dots + 7u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$((y^2 + y + 1)^6)(y^{65} + 61y^{64} + \dots - 107y - 1)$
c_2, c_6	$((y^2 - y + 1)^6)(y^{65} - 19y^{64} + \dots + 5y - 1)$
c_3, c_4, c_8	$((y + 1)^{12})(y^{65} + 71y^{64} + \dots - 7625y - 625)$
c_5, c_{11}	$((y^3 + y^2 + 2y + 1)^4)(y^{65} + 15y^{64} + \dots + 7y - 1)$
c_9, c_{10}, c_{12}	$((y^3 + 3y^2 + 2y - 1)^4)(y^{65} + 75y^{64} + \dots - 101y - 1)$