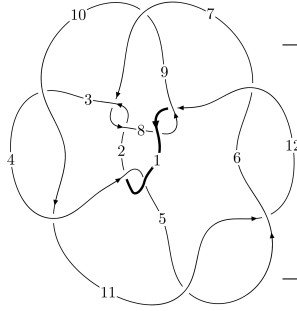
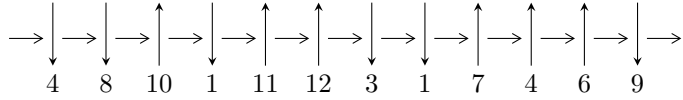


$12n_{0865}$ ($K12n_{0865}$)

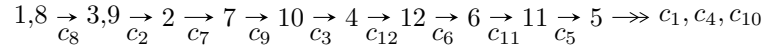


A knot diagram¹

Linearized knot diagram



Solving Sequence



Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 5.21913 \times 10^{261} u^{74} - 9.56885 \times 10^{261} u^{73} + \dots + 2.67203 \times 10^{264} b + 1.08376 \times 10^{265}, \\ - 1.00658 \times 10^{265} u^{74} + 2.74878 \times 10^{266} u^{73} + \dots + 6.32123 \times 10^{268} a - 6.89423 \times 10^{270}, \\ u^{75} - 2u^{74} + \dots - 55407u - 23657 \rangle$$

$$I_2^u = \langle 2.91037 \times 10^{16} u^{25} + 4.54222 \times 10^{16} u^{24} + \dots + 3.82887 \times 10^{16} b + 3.01035 \times 10^{16}, \\ 4.61911 \times 10^{16} u^{25} + 3.17301 \times 10^{16} u^{24} + \dots + 3.82887 \times 10^{16} a + 1.83622 \times 10^{17}, u^{26} + u^{25} + \dots + 2u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 101 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.

$$\mathbf{I. } I_1^u = \langle 5.22 \times 10^{261}u^{74} - 9.57 \times 10^{261}u^{73} + \dots + 2.67 \times 10^{264}b + 1.08 \times 10^{265}, -1.01 \times 10^{265}u^{74} + 2.75 \times 10^{266}u^{73} + \dots + 6.32 \times 10^{268}a - 6.89 \times 10^{270}, u^{75} - 2u^{74} + \dots - 55407u - 23657 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_1 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_8 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_3 &= \begin{pmatrix} 0.000159238u^{74} - 0.00434850u^{73} + \dots + 263.739u + 109.065 \\ -0.00195324u^{74} + 0.00358111u^{73} + \dots + 5.27007u - 4.05594 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 1 \\ u^2 \end{pmatrix} \\ a_2 &= \begin{pmatrix} -0.00179400u^{74} - 0.000767386u^{73} + \dots + 269.009u + 105.009 \\ -0.00195324u^{74} + 0.00358111u^{73} + \dots + 5.27007u - 4.05594 \end{pmatrix} \\ a_7 &= \begin{pmatrix} -0.000680792u^{74} - 0.00431212u^{73} + \dots + 427.714u + 166.774 \\ -0.00413535u^{74} + 0.00928373u^{73} + \dots - 54.5059u - 43.0394 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 0.000787410u^{74} + 0.00462093u^{73} + \dots - 432.170u - 181.460 \\ 0.00222760u^{74} - 0.00102269u^{73} + \dots - 245.378u - 100.388 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 0.00134340u^{74} - 0.00259924u^{73} + \dots - 135.966u - 59.0588 \\ 0.00268652u^{74} - 0.00468443u^{73} + \dots - 198.293u - 54.9937 \end{pmatrix} \\ a_{12} &= \begin{pmatrix} u \\ u^3 + u \end{pmatrix} \\ a_6 &= \begin{pmatrix} -0.00484735u^{74} + 0.00544928u^{73} + \dots + 371.990u + 115.623 \\ -0.00332545u^{74} + 0.00836454u^{73} + \dots - 129.661u - 60.4015 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} -0.0000623277u^{74} + 0.000890244u^{73} + \dots - 13.0980u - 12.5219 \\ -0.00713482u^{74} + 0.0130749u^{73} + \dots + 224.237u + 0.410665 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -0.00134340u^{74} + 0.00259924u^{73} + \dots + 135.966u + 59.0588 \\ -0.00115084u^{74} + 0.0000836745u^{73} + \dots + 161.660u + 52.9222 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $0.0123355u^{74} - 0.0295724u^{73} + \dots + 5.38788u + 130.186$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{75} - 5u^{74} + \dots - 5u - 1$
c_2, c_7	$u^{75} - u^{74} + \dots - 8219u + 2154$
c_3, c_{10}	$u^{75} - u^{74} + \dots + 7742u + 871$
c_5, c_6, c_{11}	$u^{75} + u^{74} + \dots - 261u - 38$
c_8, c_{12}	$u^{75} + 2u^{74} + \dots - 55407u + 23657$
c_9	$u^{75} - 32u^{73} + \dots + 255320u + 43933$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{75} - 41y^{74} + \dots - 1603y - 1$
c_2, c_7	$y^{75} + 43y^{74} + \dots - 85114943y - 4639716$
c_3, c_{10}	$y^{75} - 41y^{74} + \dots + 127801658y - 758641$
c_5, c_6, c_{11}	$y^{75} - 75y^{74} + \dots - 54087y - 1444$
c_8, c_{12}	$y^{75} + 46y^{74} + \dots - 10823394625y - 559653649$
c_9	$y^{75} - 64y^{74} + \dots + 57837081376y - 1930108489$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.511183 + 0.869827I$ $a = -0.419361 - 0.809039I$ $b = 0.420218 + 0.808317I$	$13.27380 - 3.79908I$	0
$u = 0.511183 - 0.869827I$ $a = -0.419361 + 0.809039I$ $b = 0.420218 - 0.808317I$	$13.27380 + 3.79908I$	0
$u = 0.104480 + 0.979928I$ $a = -0.487830 + 1.092380I$ $b = -0.921395 - 0.828476I$	$2.88960 - 2.99924I$	0
$u = 0.104480 - 0.979928I$ $a = -0.487830 - 1.092380I$ $b = -0.921395 + 0.828476I$	$2.88960 + 2.99924I$	0
$u = -0.719155 + 0.654606I$ $a = -0.916349 + 0.244548I$ $b = 0.291221 + 1.266280I$	$2.19050 - 4.12293I$	0
$u = -0.719155 - 0.654606I$ $a = -0.916349 - 0.244548I$ $b = 0.291221 - 1.266280I$	$2.19050 + 4.12293I$	0
$u = -0.951833 + 0.405463I$ $a = 0.325014 - 0.059797I$ $b = 0.61564 + 1.28372I$	$0.23121 - 5.24301I$	0
$u = -0.951833 - 0.405463I$ $a = 0.325014 + 0.059797I$ $b = 0.61564 - 1.28372I$	$0.23121 + 5.24301I$	0
$u = 0.105252 + 0.958516I$ $a = 1.006380 - 0.197424I$ $b = -0.965324 + 0.714891I$	$2.78360 + 2.13158I$	$5.83242 + 0.I$
$u = 0.105252 - 0.958516I$ $a = 1.006380 + 0.197424I$ $b = -0.965324 - 0.714891I$	$2.78360 - 2.13158I$	$5.83242 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.06089$ $a = 1.62559$ $b = 1.31782$	-3.08335	0
$u = 0.135481 + 1.054220I$ $a = -0.48758 + 2.48428I$ $b = -0.657388 - 1.149370I$	$4.42124 - 3.94617I$	0
$u = 0.135481 - 1.054220I$ $a = -0.48758 - 2.48428I$ $b = -0.657388 + 1.149370I$	$4.42124 + 3.94617I$	0
$u = 0.350665 + 0.854397I$ $a = -1.99985 + 3.03274I$ $b = -0.197313 - 0.765054I$	$-1.48854 - 3.29434I$	$7.48156 + 7.38153I$
$u = 0.350665 - 0.854397I$ $a = -1.99985 - 3.03274I$ $b = -0.197313 + 0.765054I$	$-1.48854 + 3.29434I$	$7.48156 - 7.38153I$
$u = -0.345273 + 0.854044I$ $a = -0.984101 - 0.681820I$ $b = 0.066866 - 0.805142I$	$9.05899 + 1.64001I$	$10.85898 - 4.17615I$
$u = -0.345273 - 0.854044I$ $a = -0.984101 + 0.681820I$ $b = 0.066866 + 0.805142I$	$9.05899 - 1.64001I$	$10.85898 + 4.17615I$
$u = 0.705323 + 0.845543I$ $a = 0.287297 + 0.069028I$ $b = -0.326209 + 0.901624I$	$-0.812023 - 0.611465I$	0
$u = 0.705323 - 0.845543I$ $a = 0.287297 - 0.069028I$ $b = -0.326209 - 0.901624I$	$-0.812023 + 0.611465I$	0
$u = 0.758649 + 0.798057I$ $a = -0.517700 - 0.536390I$ $b = -0.465139 + 0.778563I$	$-1.67054 - 1.21029I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.758649 - 0.798057I$ $a = -0.517700 + 0.536390I$ $b = -0.465139 - 0.778563I$	$-1.67054 + 1.21029I$	0
$u = -0.248465 + 1.077060I$ $a = -1.08986 - 2.54027I$ $b = -0.419327 + 1.083180I$	$6.37591 + 3.06208I$	0
$u = -0.248465 - 1.077060I$ $a = -1.08986 + 2.54027I$ $b = -0.419327 - 1.083180I$	$6.37591 - 3.06208I$	0
$u = 0.794516 + 0.774647I$ $a = -0.850628 + 0.384075I$ $b = -0.440996 - 0.929377I$	$-1.12250 - 4.94354I$	0
$u = 0.794516 - 0.774647I$ $a = -0.850628 - 0.384075I$ $b = -0.440996 + 0.929377I$	$-1.12250 + 4.94354I$	0
$u = -0.413012 + 1.057260I$ $a = 0.795418 + 0.507722I$ $b = 0.596653 - 1.011430I$	$3.48939 + 8.28532I$	0
$u = -0.413012 - 1.057260I$ $a = 0.795418 - 0.507722I$ $b = 0.596653 + 1.011430I$	$3.48939 - 8.28532I$	0
$u = -0.944332 + 0.653830I$ $a = 0.978690 + 0.474204I$ $b = 0.108588 - 0.808629I$	$2.09898 + 1.03718I$	0
$u = -0.944332 - 0.653830I$ $a = 0.978690 - 0.474204I$ $b = 0.108588 + 0.808629I$	$2.09898 - 1.03718I$	0
$u = -0.270614 + 0.799128I$ $a = -0.016859 - 0.980728I$ $b = -0.468669 - 0.799439I$	$5.16849 - 0.70436I$	$5.72629 - 4.08050I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.270614 - 0.799128I$ $a = -0.016859 + 0.980728I$ $b = -0.468669 + 0.799439I$	$5.16849 + 0.70436I$	$5.72629 + 4.08050I$
$u = 0.005654 + 0.817770I$ $a = 0.134044 - 0.321095I$ $b = -0.707093 + 0.936838I$	$3.39522 + 3.07685I$	$7.17303 - 2.60816I$
$u = 0.005654 - 0.817770I$ $a = 0.134044 + 0.321095I$ $b = -0.707093 - 0.936838I$	$3.39522 - 3.07685I$	$7.17303 + 2.60816I$
$u = -0.344432 + 1.153890I$ $a = -0.92417 - 2.45111I$ $b = 0.035520 + 1.086570I$	$10.28840 + 1.28609I$	0
$u = -0.344432 - 1.153890I$ $a = -0.92417 + 2.45111I$ $b = 0.035520 - 1.086570I$	$10.28840 - 1.28609I$	0
$u = 0.476100 + 1.149580I$ $a = -0.57736 + 1.68816I$ $b = 0.387664 - 1.078130I$	$14.3526 - 0.3907I$	0
$u = 0.476100 - 1.149580I$ $a = -0.57736 - 1.68816I$ $b = 0.387664 + 1.078130I$	$14.3526 + 0.3907I$	0
$u = -0.290476 + 0.669460I$ $a = 0.135376 - 0.783012I$ $b = -0.507919 + 0.840529I$	$3.54366 + 3.13776I$	$7.61659 - 5.61372I$
$u = -0.290476 - 0.669460I$ $a = 0.135376 + 0.783012I$ $b = -0.507919 - 0.840529I$	$3.54366 - 3.13776I$	$7.61659 + 5.61372I$
$u = -0.666899 + 0.273019I$ $a = 1.47056 + 0.83535I$ $b = 0.965151 - 0.289411I$	$-2.93144 + 0.56702I$	$-3.12772 + 0.55892I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.666899 - 0.273019I$ $a = 1.47056 - 0.83535I$ $b = 0.965151 + 0.289411I$	$-2.93144 - 0.56702I$	$-3.12772 - 0.55892I$
$u = -0.392778 + 1.233820I$ $a = -0.467158 + 0.321435I$ $b = 1.306830 + 0.469679I$	$0.13421 + 3.44719I$	0
$u = -0.392778 - 1.233820I$ $a = -0.467158 - 0.321435I$ $b = 1.306830 - 0.469679I$	$0.13421 - 3.44719I$	0
$u = 0.635415 + 0.279119I$ $a = -2.65731 - 1.31024I$ $b = -0.389296 - 0.211756I$	$-1.97277 - 3.13568I$	$-4.47969 + 10.61839I$
$u = 0.635415 - 0.279119I$ $a = -2.65731 + 1.31024I$ $b = -0.389296 + 0.211756I$	$-1.97277 + 3.13568I$	$-4.47969 - 10.61839I$
$u = -0.180180 + 1.306870I$ $a = 0.413334 - 0.331089I$ $b = 0.883170 + 0.676952I$	$2.37632 + 2.86198I$	0
$u = -0.180180 - 1.306870I$ $a = 0.413334 + 0.331089I$ $b = 0.883170 - 0.676952I$	$2.37632 - 2.86198I$	0
$u = -0.543058 + 1.224000I$ $a = 1.04247 + 1.66721I$ $b = 0.74590 - 1.30736I$	$2.96892 + 10.67880I$	0
$u = -0.543058 - 1.224000I$ $a = 1.04247 - 1.66721I$ $b = 0.74590 + 1.30736I$	$2.96892 - 10.67880I$	0
$u = -0.629714 + 1.222400I$ $a = 0.0776503 - 0.0540011I$ $b = 0.398225 + 0.534595I$	$4.24733 + 4.78659I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.629714 - 1.222400I$ $a = 0.0776503 + 0.0540011I$ $b = 0.398225 - 0.534595I$	$4.24733 - 4.78659I$	0
$u = 0.314578 + 0.476986I$ $a = -0.094362 - 0.551096I$ $b = 0.215787 + 0.477288I$	$0.081149 - 0.980104I$	$1.59159 + 6.68499I$
$u = 0.314578 - 0.476986I$ $a = -0.094362 + 0.551096I$ $b = 0.215787 - 0.477288I$	$0.081149 + 0.980104I$	$1.59159 - 6.68499I$
$u = -1.30828 + 0.58916I$ $a = 0.312227 - 0.663397I$ $b = 0.217080 + 1.085900I$	$3.29323 - 0.45591I$	0
$u = -1.30828 - 0.58916I$ $a = 0.312227 + 0.663397I$ $b = 0.217080 - 1.085900I$	$3.29323 + 0.45591I$	0
$u = -0.562667$ $a = 0.589903$ $b = -0.367718$	1.77914	4.46500
$u = 1.01188 + 1.05851I$ $a = 0.366442 - 0.296992I$ $b = 0.946313 - 0.997142I$	$10.40690 - 0.26071I$	0
$u = 1.01188 - 1.05851I$ $a = 0.366442 + 0.296992I$ $b = 0.946313 + 0.997142I$	$10.40690 + 0.26071I$	0
$u = 0.84420 + 1.25393I$ $a = 1.23810 - 1.08437I$ $b = 0.78131 + 1.18814I$	$11.30420 - 7.23486I$	0
$u = 0.84420 - 1.25393I$ $a = 1.23810 + 1.08437I$ $b = 0.78131 - 1.18814I$	$11.30420 + 7.23486I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.74519 + 1.34261I$		
$a = 1.00802 + 1.48284I$	$5.99761 + 7.90570I$	0
$b = 0.353123 - 1.081330I$		
$u = -0.74519 - 1.34261I$		
$a = 1.00802 - 1.48284I$	$5.99761 - 7.90570I$	0
$b = 0.353123 + 1.081330I$		
$u = -0.04853 + 1.60376I$		
$a = -0.11926 - 1.50581I$	$8.17405 - 1.89172I$	0
$b = 0.17633 + 1.63943I$		
$u = -0.04853 - 1.60376I$		
$a = -0.11926 + 1.50581I$	$8.17405 + 1.89172I$	0
$b = 0.17633 - 1.63943I$		
$u = -0.13866 + 1.65730I$		
$a = 0.05286 - 1.55805I$	$12.02590 + 4.38057I$	0
$b = -0.05126 + 1.58160I$		
$u = -0.13866 - 1.65730I$		
$a = 0.05286 + 1.55805I$	$12.02590 - 4.38057I$	0
$b = -0.05126 - 1.58160I$		
$u = 0.77641 + 1.51662I$		
$a = -0.85410 + 1.22196I$	$9.3327 - 16.0128I$	0
$b = -0.75448 - 1.43700I$		
$u = 0.77641 - 1.51662I$		
$a = -0.85410 - 1.22196I$	$9.3327 + 16.0128I$	0
$b = -0.75448 + 1.43700I$		
$u = 1.68879 + 0.30055I$		
$a = -0.309838 - 0.248663I$	$5.24750 + 7.57788I$	0
$b = -0.54887 + 1.55886I$		
$u = 1.68879 - 0.30055I$		
$a = -0.309838 + 0.248663I$	$5.24750 - 7.57788I$	0
$b = -0.54887 - 1.55886I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.55982 + 1.63014I$	$5.54758 - 8.17895I$	0
$a = 0.099724 + 0.263898I$		
$b = -1.53326 + 0.28524I$		
$u = 0.55982 - 1.63014I$	$5.54758 + 8.17895I$	0
$a = 0.099724 - 0.263898I$		
$b = -1.53326 - 0.28524I$		
$u = 1.83510$	-0.530763	0
$a = -0.883746$		
$b = -1.70115$		
$u = 0.29670 + 1.93221I$	$13.17690 - 0.66579I$	0
$a = 0.134528 - 1.114210I$		
$b = -0.28215 + 1.84615I$		
$u = 0.29670 - 1.93221I$	$13.17690 + 0.66579I$	0
$a = 0.134528 + 1.114210I$		
$b = -0.28215 - 1.84615I$		

II.

$$I_2^u = \langle 2.91 \times 10^{16} u^{25} + 4.54 \times 10^{16} u^{24} + \dots + 3.83 \times 10^{16} b + 3.01 \times 10^{16}, 4.62 \times 10^{16} u^{25} + 3.17 \times 10^{16} u^{24} + \dots + 3.83 \times 10^{16} a + 1.84 \times 10^{17}, u^{26} + u^{25} + \dots + 2u - 1 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_1 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_8 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -1.20639u^{25} - 0.828706u^{24} + \dots + 1.73262u - 4.79572 \\ -0.760112u^{25} - 1.18631u^{24} + \dots + 0.958027u - 0.786224 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 1 \\ u^2 \end{pmatrix} \\ a_2 &= \begin{pmatrix} -1.96650u^{25} - 2.01501u^{24} + \dots + 2.69064u - 5.58194 \\ -0.760112u^{25} - 1.18631u^{24} + \dots + 0.958027u - 0.786224 \end{pmatrix} \\ a_7 &= \begin{pmatrix} -1.21642u^{25} - 1.65800u^{24} + \dots + 5.13990u - 0.269556 \\ -0.349076u^{25} - 0.479614u^{24} + \dots + 0.400726u - 0.201686 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 1.78308u^{25} + 2.35335u^{24} + \dots - 5.51137u + 2.67400 \\ 0.667069u^{25} + 1.03486u^{24} + \dots - 0.913447u + 0.959951 \end{pmatrix} \\ a_4 &= \begin{pmatrix} -0.587265u^{25} - 0.150117u^{24} + \dots + 4.51193u - 2.36445 \\ 0.343491u^{25} + 0.719740u^{24} + \dots + 0.776310u - 0.0574895 \end{pmatrix} \\ a_{12} &= \begin{pmatrix} u \\ u^3 + u \end{pmatrix} \\ a_6 &= \begin{pmatrix} -1.08773u^{25} - 1.48220u^{24} + \dots + 5.02109u - 0.605262 \\ -0.288867u^{25} - 0.351748u^{24} + \dots + 0.316391u - 0.490286 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} -0.216918u^{25} - 0.646654u^{24} + \dots + 2.48863u + 1.67400 \\ 0.237853u^{25} + 0.384292u^{24} + \dots + 0.936192u + 0.323441 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -0.587265u^{25} - 0.150117u^{24} + \dots + 4.51193u - 2.36445 \\ 0.973066u^{25} + 1.61974u^{24} + \dots - 0.685252u + 0.379659 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes

$$= \frac{99120760696784782}{38288701182749165} u^{25} + \frac{156882915669688696}{38288701182749165} u^{24} + \dots - \frac{288719780225598979}{38288701182749165} u + \frac{292380986892480686}{38288701182749165}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{26} - 6u^{25} + \dots + 6u^2 + 1$
c_2	$u^{26} + 8u^{24} + \dots - 5u^2 - 1$
c_3	$u^{26} - 8u^{24} + \dots - u - 1$
c_4	$u^{26} + 6u^{25} + \dots + 6u^2 + 1$
c_5, c_6	$u^{26} - 15u^{24} + \dots + 6u + 5$
c_7	$u^{26} + 8u^{24} + \dots - 5u^2 - 1$
c_8	$u^{26} + u^{25} + \dots + 2u - 1$
c_9	$u^{26} - 7u^{25} + \dots + u + 1$
c_{10}	$u^{26} - 8u^{24} + \dots + u - 1$
c_{11}	$u^{26} - 15u^{24} + \dots - 6u + 5$
c_{12}	$u^{26} - u^{25} + \dots - 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{26} - 12y^{25} + \cdots + 12y + 1$
c_2, c_7	$y^{26} + 16y^{25} + \cdots + 10y + 1$
c_3, c_{10}	$y^{26} - 16y^{25} + \cdots - 13y + 1$
c_5, c_6, c_{11}	$y^{26} - 30y^{25} + \cdots - 186y + 25$
c_8, c_{12}	$y^{26} + 15y^{25} + \cdots + 2y + 1$
c_9	$y^{26} - 27y^{25} + \cdots - 15y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.590338 + 0.822308I$ $a = -0.653984 + 0.298112I$ $b = -0.538989 + 0.321894I$	$-1.82169 - 2.18919I$	$0.71594 + 4.52010I$
$u = 0.590338 - 0.822308I$ $a = -0.653984 - 0.298112I$ $b = -0.538989 - 0.321894I$	$-1.82169 + 2.18919I$	$0.71594 - 4.52010I$
$u = -0.557582 + 0.811780I$ $a = -0.939860 - 0.765220I$ $b = -0.394713 - 0.799564I$	$8.44513 + 0.58228I$	$5.42167 + 1.05599I$
$u = -0.557582 - 0.811780I$ $a = -0.939860 + 0.765220I$ $b = -0.394713 + 0.799564I$	$8.44513 - 0.58228I$	$5.42167 - 1.05599I$
$u = -0.707692 + 0.742232I$ $a = -0.362984 - 0.288573I$ $b = 0.668229 + 0.896349I$	$1.25227 - 1.24373I$	$1.52510 + 0.51708I$
$u = -0.707692 - 0.742232I$ $a = -0.362984 + 0.288573I$ $b = 0.668229 - 0.896349I$	$1.25227 + 1.24373I$	$1.52510 - 0.51708I$
$u = 0.483441 + 0.822664I$ $a = 0.761342 + 0.842929I$ $b = -0.372992 - 0.771746I$	$13.38500 - 3.45757I$	$11.87393 - 5.98331I$
$u = 0.483441 - 0.822664I$ $a = 0.761342 - 0.842929I$ $b = -0.372992 + 0.771746I$	$13.38500 + 3.45757I$	$11.87393 + 5.98331I$
$u = 1.08679$ $a = -1.58066$ $b = -1.47725$	-2.80705	16.8370
$u = 0.045717 + 0.769529I$ $a = -0.950994 - 1.030120I$ $b = 0.410209 - 0.705964I$	$5.25690 + 1.40544I$	$7.78165 - 5.67202I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.045717 - 0.769529I$ $a = -0.950994 + 1.030120I$ $b = 0.410209 + 0.705964I$	$5.25690 - 1.40544I$	$7.78165 + 5.67202I$
$u = 0.642147 + 0.048358I$ $a = -0.419788 + 1.064220I$ $b = -0.538855 + 1.302890I$	$2.16901 + 5.99916I$	$5.67527 - 5.94920I$
$u = 0.642147 - 0.048358I$ $a = -0.419788 - 1.064220I$ $b = -0.538855 - 1.302890I$	$2.16901 - 5.99916I$	$5.67527 + 5.94920I$
$u = -0.600554 + 0.170802I$ $a = 1.38453 + 0.96038I$ $b = 0.566860 - 1.040450I$	$2.02423 + 3.48369I$	$2.43057 - 3.98201I$
$u = -0.600554 - 0.170802I$ $a = 1.38453 - 0.96038I$ $b = 0.566860 + 1.040450I$	$2.02423 - 3.48369I$	$2.43057 + 3.98201I$
$u = -0.522844 + 1.292900I$ $a = 0.406590 + 0.413033I$ $b = 0.602021 - 0.151872I$	$3.96287 + 5.81407I$	$5.34419 - 5.82137I$
$u = -0.522844 - 1.292900I$ $a = 0.406590 - 0.413033I$ $b = 0.602021 + 0.151872I$	$3.96287 - 5.81407I$	$5.34419 + 5.82137I$
$u = -0.03051 + 1.50118I$ $a = -0.07962 - 1.68896I$ $b = 0.24430 + 1.51368I$	$8.69381 - 1.77690I$	$13.20778 + 0.66664I$
$u = -0.03051 - 1.50118I$ $a = -0.07962 + 1.68896I$ $b = 0.24430 - 1.51368I$	$8.69381 + 1.77690I$	$13.20778 - 0.66664I$
$u = 0.41159 + 1.44584I$ $a = 0.36105 - 1.47823I$ $b = -0.314006 + 1.374820I$	$15.7218 - 0.4856I$	$11.71944 + 0.11882I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.41159 - 1.44584I$ $a = 0.36105 + 1.47823I$ $b = -0.314006 - 1.374820I$	$15.7218 + 0.4856I$	$11.71944 - 0.11882I$
$u = 0.263927 + 0.407365I$ $a = -4.99855 + 0.90395I$ $b = -0.082774 + 0.451542I$	$-1.74954 - 2.69727I$	$3.12762 - 4.76260I$
$u = 0.263927 - 0.407365I$ $a = -4.99855 - 0.90395I$ $b = -0.082774 - 0.451542I$	$-1.74954 + 2.69727I$	$3.12762 + 4.76260I$
$u = -1.55396$ $a = 0.975493$ $b = 1.31730$	-1.20091	-0.133790
$u = -0.28440 + 1.64109I$ $a = -0.20515 - 1.56996I$ $b = -0.16931 + 1.58057I$	$12.10650 + 3.82226I$	$10.32517 + 2.41347I$
$u = -0.28440 - 1.64109I$ $a = -0.20515 + 1.56996I$ $b = -0.16931 - 1.58057I$	$12.10650 - 3.82226I$	$10.32517 - 2.41347I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{26} - 6u^{25} + \dots + 6u^2 + 1)(u^{75} - 5u^{74} + \dots - 5u - 1)$
c_2	$(u^{26} + 8u^{24} + \dots - 5u^2 - 1)(u^{75} - u^{74} + \dots - 8219u + 2154)$
c_3	$(u^{26} - 8u^{24} + \dots - u - 1)(u^{75} - u^{74} + \dots + 7742u + 871)$
c_4	$(u^{26} + 6u^{25} + \dots + 6u^2 + 1)(u^{75} - 5u^{74} + \dots - 5u - 1)$
c_5, c_6	$(u^{26} - 15u^{24} + \dots + 6u + 5)(u^{75} + u^{74} + \dots - 261u - 38)$
c_7	$(u^{26} + 8u^{24} + \dots - 5u^2 - 1)(u^{75} - u^{74} + \dots - 8219u + 2154)$
c_8	$(u^{26} + u^{25} + \dots + 2u - 1)(u^{75} + 2u^{74} + \dots - 55407u + 23657)$
c_9	$(u^{26} - 7u^{25} + \dots + u + 1)(u^{75} - 32u^{73} + \dots + 255320u + 43933)$
c_{10}	$(u^{26} - 8u^{24} + \dots + u - 1)(u^{75} - u^{74} + \dots + 7742u + 871)$
c_{11}	$(u^{26} - 15u^{24} + \dots - 6u + 5)(u^{75} + u^{74} + \dots - 261u - 38)$
c_{12}	$(u^{26} - u^{25} + \dots - 2u - 1)(u^{75} + 2u^{74} + \dots - 55407u + 23657)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$(y^{26} - 12y^{25} + \dots + 12y + 1)(y^{75} - 41y^{74} + \dots - 1603y - 1)$
c_2, c_7	$(y^{26} + 16y^{25} + \dots + 10y + 1)$ $\cdot (y^{75} + 43y^{74} + \dots - 85114943y - 4639716)$
c_3, c_{10}	$(y^{26} - 16y^{25} + \dots - 13y + 1)$ $\cdot (y^{75} - 41y^{74} + \dots + 127801658y - 758641)$
c_5, c_6, c_{11}	$(y^{26} - 30y^{25} + \dots - 186y + 25)(y^{75} - 75y^{74} + \dots - 54087y - 1444)$
c_8, c_{12}	$(y^{26} + 15y^{25} + \dots + 2y + 1)$ $\cdot (y^{75} + 46y^{74} + \dots - 10823394625y - 559653649)$
c_9	$(y^{26} - 27y^{25} + \dots - 15y + 1)$ $\cdot (y^{75} - 64y^{74} + \dots + 57837081376y - 1930108489)$