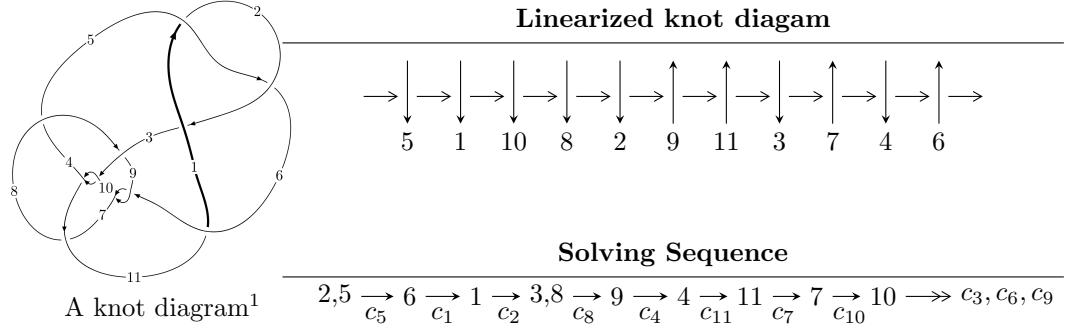


$11a_{147}$ ($K11a_{147}$)



Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 9.07204 \times 10^{41} u^{77} + 7.90148 \times 10^{41} u^{76} + \dots + 2.06037 \times 10^{42} b - 1.56482 \times 10^{41},$$

$$1.17116 \times 10^{42} u^{77} + 1.73368 \times 10^{42} u^{76} + \dots + 2.06037 \times 10^{42} a - 6.11073 \times 10^{42}, u^{78} + 2u^{77} + \dots - 2u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 81 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/math/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.

I.

$$I_1^u = \langle 9.07 \times 10^{41} u^{77} + 7.90 \times 10^{41} u^{76} + \dots + 2.06 \times 10^{42} b - 1.56 \times 10^{41}, 1.17 \times 10^{42} u^{77} + 1.73 \times 10^{42} u^{76} + \dots + 2.06 \times 10^{42} a - 6.11 \times 10^{42}, u^{78} + 2u^{77} + \dots - 2u - 1 \rangle$$

(i) **Arc colorings**

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u^3 \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.568420u^{77} - 0.841443u^{76} + \dots + 7.36773u + 2.96584 \\ -0.440311u^{77} - 0.383498u^{76} + \dots + 0.720857u + 0.0759485 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.82193u^{77} - 2.29694u^{76} + \dots + 8.78768u + 3.83863 \\ -1.36819u^{77} - 2.06052u^{76} + \dots + 2.39639u + 1.90814 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1.18444u^{77} - 2.09711u^{76} + \dots + 1.00657u + 1.49223 \\ 0.344158u^{77} + 1.17317u^{76} + \dots - 0.834190u - 1.22870 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.12364u^{77} - 1.00031u^{76} + \dots + 7.99454u + 3.41779 \\ -1.37767u^{77} - 1.68487u^{76} + \dots + 2.56542u + 1.34481 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.18444u^{77} + 2.09711u^{76} + \dots - 1.00657u - 1.49223 \\ 0.380290u^{77} + 1.21706u^{76} + \dots - 0.193293u - 1.50047 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.18444u^{77} + 2.09711u^{76} + \dots - 1.00657u - 1.49223 \\ 0.380290u^{77} + 1.21706u^{76} + \dots - 0.193293u - 1.50047 \end{pmatrix}$$

(ii) **Obstruction class** = -1

(iii) **Cusp Shapes** = $3.52017u^{77} + 0.863610u^{76} + \dots - 23.9616u - 10.9917$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{78} + 2u^{77} + \cdots - 2u - 1$
c_2	$u^{78} + 38u^{77} + \cdots + 4u + 1$
c_3, c_{10}	$u^{78} + 2u^{77} + \cdots + 4u + 1$
c_4	$u^{78} + 3u^{77} + \cdots + 1620u + 200$
c_6, c_9	$u^{78} + 4u^{77} + \cdots - 349u - 25$
c_7	$5(5u^{78} + 22u^{77} + \cdots - 2074u - 329)$
c_8	$5(5u^{78} - 57u^{77} + \cdots - 1179u - 1431)$
c_{11}	$u^{78} + 6u^{77} + \cdots - 20170u - 4025$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{78} - 38y^{77} + \cdots - 4y + 1$
c_2	$y^{78} + 6y^{77} + \cdots + 8y + 1$
c_3, c_{10}	$y^{78} - 42y^{77} + \cdots - 4y + 1$
c_4	$y^{78} - 21y^{77} + \cdots - 354000y + 40000$
c_6, c_9	$y^{78} - 44y^{77} + \cdots - 59401y + 625$
c_7	$25(25y^{78} + 186y^{77} + \cdots + 726960y + 108241)$
c_8	$25(25y^{78} - 499y^{77} + \cdots - 2.01676 \times 10^7 y + 2047761)$
c_{11}	$y^{78} + 26y^{77} + \cdots - 39169300y + 16200625$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.746844 + 0.705544I$		
$a = -0.478258 - 0.846046I$	$1.84214 + 9.51725I$	0
$b = -0.973201 + 0.859230I$		
$u = -0.746844 - 0.705544I$		
$a = -0.478258 + 0.846046I$	$1.84214 - 9.51725I$	0
$b = -0.973201 - 0.859230I$		
$u = 0.733786 + 0.768282I$		
$a = -0.238190 + 0.368034I$	$5.29151 - 3.14059I$	0
$b = -0.480787 - 0.550929I$		
$u = 0.733786 - 0.768282I$		
$a = -0.238190 - 0.368034I$	$5.29151 + 3.14059I$	0
$b = -0.480787 + 0.550929I$		
$u = -1.024600 + 0.336794I$		
$a = 1.54401 - 1.42228I$	$-2.14618 - 1.33328I$	0
$b = 0.01866 - 1.42927I$		
$u = -1.024600 - 0.336794I$		
$a = 1.54401 + 1.42228I$	$-2.14618 + 1.33328I$	0
$b = 0.01866 + 1.42927I$		
$u = -0.850399 + 0.683748I$		
$a = -0.505972 + 0.523823I$	$1.54329 - 4.25093I$	0
$b = 0.842741 + 0.745286I$		
$u = -0.850399 - 0.683748I$		
$a = -0.505972 - 0.523823I$	$1.54329 + 4.25093I$	0
$b = 0.842741 - 0.745286I$		
$u = -0.739719 + 0.511752I$		
$a = 0.333454 + 0.752332I$	$-1.96956 + 4.60975I$	$-4.54210 - 7.29697I$
$b = 0.877805 - 0.981944I$		
$u = -0.739719 - 0.511752I$		
$a = 0.333454 - 0.752332I$	$-1.96956 - 4.60975I$	$-4.54210 + 7.29697I$
$b = 0.877805 + 0.981944I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.309437 + 0.842121I$		
$a = -0.303870 - 0.378991I$	$2.88434 + 6.11355I$	$0.57263 - 4.98451I$
$b = -0.893991 + 0.759593I$		
$u = 0.309437 - 0.842121I$		
$a = -0.303870 + 0.378991I$	$2.88434 - 6.11355I$	$0.57263 + 4.98451I$
$b = -0.893991 - 0.759593I$		
$u = 1.030610 + 0.412848I$		
$a = 1.68779 - 0.30818I$	$-0.08665 - 1.81934I$	0
$b = 0.372068 + 0.975530I$		
$u = 1.030610 - 0.412848I$		
$a = 1.68779 + 0.30818I$	$-0.08665 + 1.81934I$	0
$b = 0.372068 - 0.975530I$		
$u = -0.289191 + 0.831056I$		
$a = -0.532023 + 0.563698I$	$-0.68796 - 12.03560I$	$-2.39702 + 6.80252I$
$b = -1.25627 - 0.93792I$		
$u = -0.289191 - 0.831056I$		
$a = -0.532023 - 0.563698I$	$-0.68796 + 12.03560I$	$-2.39702 - 6.80252I$
$b = -1.25627 + 0.93792I$		
$u = 1.017100 + 0.476390I$		
$a = 2.80013 - 1.11064I$	$0.76206 - 1.48191I$	0
$b = 1.24917 + 0.87506I$		
$u = 1.017100 - 0.476390I$		
$a = 2.80013 + 1.11064I$	$0.76206 + 1.48191I$	0
$b = 1.24917 - 0.87506I$		
$u = -0.367142 + 0.771630I$		
$a = 0.295260 + 0.430720I$	$-2.74670 - 1.03689I$	$-6.52285 + 3.02306I$
$b = -0.826296 - 0.097021I$		
$u = -0.367142 - 0.771630I$		
$a = 0.295260 - 0.430720I$	$-2.74670 + 1.03689I$	$-6.52285 - 3.02306I$
$b = -0.826296 + 0.097021I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.149695 + 0.830340I$		
$a = 0.245507 - 0.296928I$	$-2.45171 + 2.55877I$	$-5.85987 - 5.37138I$
$b = 0.865089 - 0.200429I$		
$u = -0.149695 - 0.830340I$		
$a = 0.245507 + 0.296928I$	$-2.45171 - 2.55877I$	$-5.85987 + 5.37138I$
$b = 0.865089 + 0.200429I$		
$u = -1.088040 + 0.413183I$		
$a = -1.09001 + 0.98084I$	$-3.19952 + 3.59888I$	0
$b = -0.001009 - 0.600156I$		
$u = -1.088040 - 0.413183I$		
$a = -1.09001 - 0.98084I$	$-3.19952 - 3.59888I$	0
$b = -0.001009 + 0.600156I$		
$u = 1.139890 + 0.236298I$		
$a = 1.41756 + 0.21010I$	$-7.37477 - 1.65920I$	0
$b = 1.132930 + 0.048625I$		
$u = 1.139890 - 0.236298I$		
$a = 1.41756 - 0.21010I$	$-7.37477 + 1.65920I$	0
$b = 1.132930 - 0.048625I$		
$u = -1.051900 + 0.501021I$		
$a = 1.93452 + 1.70901I$	$1.14399 + 4.70367I$	0
$b = 1.48871 + 0.16626I$		
$u = -1.051900 - 0.501021I$		
$a = 1.93452 - 1.70901I$	$1.14399 - 4.70367I$	0
$b = 1.48871 - 0.16626I$		
$u = -1.078790 + 0.507036I$		
$a = 0.473785 + 1.201770I$	$0.70811 + 4.91347I$	0
$b = 0.961578 + 0.893094I$		
$u = -1.078790 - 0.507036I$		
$a = 0.473785 - 1.201770I$	$0.70811 - 4.91347I$	0
$b = 0.961578 - 0.893094I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.934335 + 0.746651I$		
$a = -0.193081 - 0.276408I$	$4.74268 - 2.53637I$	0
$b = 0.385335 - 0.321158I$		
$u = 0.934335 - 0.746651I$		
$a = -0.193081 + 0.276408I$	$4.74268 + 2.53637I$	0
$b = 0.385335 + 0.321158I$		
$u = 1.155640 + 0.314214I$		
$a = -1.98719 + 1.54907I$	$-8.20158 + 2.35498I$	0
$b = -1.52907 + 0.68369I$		
$u = 1.155640 - 0.314214I$		
$a = -1.98719 - 1.54907I$	$-8.20158 - 2.35498I$	0
$b = -1.52907 - 0.68369I$		
$u = 1.105230 + 0.476843I$		
$a = -1.41172 + 3.06153I$	$-2.73306 - 3.75480I$	0
$b = 0.065078 - 0.438552I$		
$u = 1.105230 - 0.476843I$		
$a = -1.41172 - 3.06153I$	$-2.73306 + 3.75480I$	0
$b = 0.065078 + 0.438552I$		
$u = -1.155380 + 0.357963I$		
$a = -1.26784 - 0.83955I$	$-4.19189 + 1.50549I$	0
$b = -0.924109 - 0.405905I$		
$u = -1.155380 - 0.357963I$		
$a = -1.26784 + 0.83955I$	$-4.19189 - 1.50549I$	0
$b = -0.924109 + 0.405905I$		
$u = -0.625614 + 0.475003I$		
$a = 1.41445 - 0.35012I$	$-1.77605 - 0.65095I$	$-5.05775 - 1.02917I$
$b = -0.483183 - 0.492391I$		
$u = -0.625614 - 0.475003I$		
$a = 1.41445 + 0.35012I$	$-1.77605 + 0.65095I$	$-5.05775 + 1.02917I$
$b = -0.483183 + 0.492391I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.096640 + 0.524719I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -1.33967 - 1.54913I$	$-0.80322 - 8.33176I$	0
$b = 0.48017 - 1.76300I$		
$u = 1.096640 - 0.524719I$		
$a = -1.33967 + 1.54913I$	$-0.80322 + 8.33176I$	0
$b = 0.48017 + 1.76300I$		
$u = -0.238423 + 0.742435I$		
$a = 0.513424 - 0.435915I$	$-4.07487 - 5.63539I$	$-5.32059 + 5.07237I$
$b = 1.44532 + 0.92730I$		
$u = -0.238423 - 0.742435I$		
$a = 0.513424 + 0.435915I$	$-4.07487 + 5.63539I$	$-5.32059 - 5.07237I$
$b = 1.44532 - 0.92730I$		
$u = -1.207250 + 0.220796I$		
$a = 1.27897 + 0.72201I$	$-2.09592 - 2.91398I$	0
$b = 0.968015 + 0.543909I$		
$u = -1.207250 - 0.220796I$		
$a = 1.27897 - 0.72201I$	$-2.09592 + 2.91398I$	0
$b = 0.968015 - 0.543909I$		
$u = 0.653825 + 0.410103I$		
$a = 0.603104 - 0.900709I$	$1.09693 - 1.53880I$	$1.66479 + 5.08310I$
$b = 0.137771 + 0.795666I$		
$u = 0.653825 - 0.410103I$		
$a = 0.603104 + 0.900709I$	$1.09693 + 1.53880I$	$1.66479 - 5.08310I$
$b = 0.137771 - 0.795666I$		
$u = 1.207280 + 0.247867I$		
$a = 1.80061 - 1.10036I$	$-5.50516 + 8.73601I$	0
$b = 1.29376 - 0.79776I$		
$u = 1.207280 - 0.247867I$		
$a = 1.80061 + 1.10036I$	$-5.50516 - 8.73601I$	0
$b = 1.29376 + 0.79776I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.141590 + 0.513261I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -1.97225 + 0.58221I$	$-3.10971 - 6.53083I$	0
$b = -0.883958 - 0.783696I$		
$u = 1.141590 - 0.513261I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -1.97225 - 0.58221I$	$-3.10971 + 6.53083I$	0
$b = -0.883958 + 0.783696I$		
$u = 0.536973 + 0.520683I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.275984 - 0.550833I$	$2.17308 - 2.60159I$	$2.40455 + 6.09883I$
$b = -0.91164 + 1.14392I$		
$u = 0.536973 - 0.520683I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.275984 + 0.550833I$	$2.17308 + 2.60159I$	$2.40455 - 6.09883I$
$b = -0.91164 - 1.14392I$		
$u = -0.739477$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.804258$	-0.989802	-10.9810
$b = 0.322518$		
$u = 1.214520 + 0.340708I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -1.65330 - 0.02146I$	$-6.71121 - 6.46472I$	0
$b = -1.065870 - 0.267377I$		
$u = 1.214520 - 0.340708I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -1.65330 + 0.02146I$	$-6.71121 + 6.46472I$	0
$b = -1.065870 + 0.267377I$		
$u = -1.145480 + 0.533343I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -2.71029 - 1.10644I$	$-6.70525 + 10.43610I$	0
$b = -1.59668 + 0.98544I$		
$u = -1.145480 - 0.533343I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -2.71029 + 1.10644I$	$-6.70525 - 10.43610I$	0
$b = -1.59668 - 0.98544I$		
$u = -1.129540 + 0.584934I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.773398 + 1.151490I$	$-5.00368 + 6.17548I$	0
$b = 0.901036 - 0.260596I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.129540 - 0.584934I$		
$a = 0.773398 - 1.151490I$	$-5.00368 - 6.17548I$	0
$b = 0.901036 + 0.260596I$		
$u = 0.193316 + 0.691312I$		
$a = 0.545322 + 0.428076I$	$-0.42144 + 1.94552I$	$-2.30995 - 3.00822I$
$b = 0.704072 - 0.657723I$		
$u = 0.193316 - 0.691312I$		
$a = 0.545322 - 0.428076I$	$-0.42144 - 1.94552I$	$-2.30995 + 3.00822I$
$b = 0.704072 + 0.657723I$		
$u = 0.325468 + 0.636702I$		
$a = -0.138810 + 0.488594I$	$1.40525 + 3.78104I$	$0.49759 - 6.55380I$
$b = -0.55951 - 1.52885I$		
$u = 0.325468 - 0.636702I$		
$a = -0.138810 - 0.488594I$	$1.40525 - 3.78104I$	$0.49759 + 6.55380I$
$b = -0.55951 + 1.52885I$		
$u = -1.187200 + 0.508151I$		
$a = -1.06426 - 1.06765I$	$-5.56201 + 2.30321I$	0
$b = -0.898331 - 0.033808I$		
$u = -1.187200 - 0.508151I$		
$a = -1.06426 + 1.06765I$	$-5.56201 - 2.30321I$	0
$b = -0.898331 + 0.033808I$		
$u = -1.162450 + 0.573065I$		
$a = 2.39742 + 1.05722I$	$-3.2894 + 17.2353I$	0
$b = 1.32796 - 0.97627I$		
$u = -1.162450 - 0.573065I$		
$a = 2.39742 - 1.05722I$	$-3.2894 - 17.2353I$	0
$b = 1.32796 + 0.97627I$		
$u = 1.160070 + 0.582250I$		
$a = 1.80074 - 0.72766I$	$0.33944 - 11.38210I$	0
$b = 0.995785 + 0.824598I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.160070 - 0.582250I$		
$a = 1.80074 + 0.72766I$	$0.33944 + 11.38210I$	0
$b = 0.995785 - 0.824598I$		
$u = -0.432470 + 0.537624I$		
$a = -0.965637 + 0.005674I$	$2.94199 - 0.45731I$	$3.21783 + 1.77421I$
$b = -1.239030 - 0.068800I$		
$u = -0.432470 - 0.537624I$		
$a = -0.965637 - 0.005674I$	$2.94199 + 0.45731I$	$3.21783 - 1.77421I$
$b = -1.239030 + 0.068800I$		
$u = -0.365285 + 0.557959I$		
$a = -0.893897 - 0.608044I$	$2.76015 - 0.59113I$	$3.15854 - 1.26752I$
$b = -0.953283 + 0.561262I$		
$u = -0.365285 - 0.557959I$		
$a = -0.893897 + 0.608044I$	$2.76015 + 0.59113I$	$3.15854 + 1.26752I$
$b = -0.953283 - 0.561262I$		
$u = 0.594731$		
$a = 8.24266$	0.210538	-40.2340
$b = 0.365566$		
$u = 0.152062 + 0.532162I$		
$a = 3.33933 + 3.13837I$	$-0.213305 - 0.310477I$	$5.75572 - 9.22224I$
$b = 0.119106 - 0.447244I$		
$u = 0.152062 - 0.532162I$		
$a = 3.33933 - 3.13837I$	$-0.213305 + 0.310477I$	$5.75572 + 9.22224I$
$b = 0.119106 + 0.447244I$		

$$\text{II. } I_2^u = \langle b, -3u^2 + 5a + 7u - 6, u^3 - u^2 + 1 \rangle$$

(i) Arc colorings

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

(ii) Obstruction class = 1

(iii) Cusp Shapes = $\frac{277}{25}u^2 - \frac{93}{25}u - \frac{181}{25}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^3 + u^2 - 1$
c_2, c_3	$u^3 + u^2 + 2u + 1$
c_4	u^3
c_5	$u^3 - u^2 + 1$
c_6	$(u + 1)^3$
c_7	$5(5u^3 + 11u^2 + 6u + 1)$
c_8	$5(5u^3 + 4u^2 + u + 1)$
c_9	$(u - 1)^3$
c_{10}	$u^3 - u^2 + 2u - 1$
c_{11}	$u^3 + 3u^2 + 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^3 - y^2 + 2y - 1$
c_2, c_3, c_{10}	$y^3 + 3y^2 + 2y - 1$
c_4	y^3
c_6, c_9	$(y - 1)^3$
c_7	$25(25y^3 - 61y^2 + 14y - 1)$
c_8	$25(25y^3 - 6y^2 - 7y - 1)$
c_{11}	$y^3 - 5y^2 + 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$		
$a = 0.100634 - 0.258522I$	$4.66906 - 2.82812I$	$-8.1210 + 11.7122I$
$b = 0$		
$u = 0.877439 - 0.744862I$		
$a = 0.100634 + 0.258522I$	$4.66906 + 2.82812I$	$-8.1210 - 11.7122I$
$b = 0$		
$u = -0.754878$		
$a = 2.59873$	0.531480	1.88200
$b = 0$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^3 + u^2 - 1)(u^{78} + 2u^{77} + \dots - 2u - 1)$
c_2	$(u^3 + u^2 + 2u + 1)(u^{78} + 38u^{77} + \dots + 4u + 1)$
c_3	$(u^3 + u^2 + 2u + 1)(u^{78} + 2u^{77} + \dots + 4u + 1)$
c_4	$u^3(u^{78} + 3u^{77} + \dots + 1620u + 200)$
c_5	$(u^3 - u^2 + 1)(u^{78} + 2u^{77} + \dots - 2u - 1)$
c_6	$((u + 1)^3)(u^{78} + 4u^{77} + \dots - 349u - 25)$
c_7	$25(5u^3 + 11u^2 + 6u + 1)(5u^{78} + 22u^{77} + \dots - 2074u - 329)$
c_8	$25(5u^3 + 4u^2 + u + 1)(5u^{78} - 57u^{77} + \dots - 1179u - 1431)$
c_9	$((u - 1)^3)(u^{78} + 4u^{77} + \dots - 349u - 25)$
c_{10}	$(u^3 - u^2 + 2u - 1)(u^{78} + 2u^{77} + \dots + 4u + 1)$
c_{11}	$(u^3 + 3u^2 + 2u - 1)(u^{78} + 6u^{77} + \dots - 20170u - 4025)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^3 - y^2 + 2y - 1)(y^{78} - 38y^{77} + \dots - 4y + 1)$
c_2	$(y^3 + 3y^2 + 2y - 1)(y^{78} + 6y^{77} + \dots + 8y + 1)$
c_3, c_{10}	$(y^3 + 3y^2 + 2y - 1)(y^{78} - 42y^{77} + \dots - 4y + 1)$
c_4	$y^3(y^{78} - 21y^{77} + \dots - 354000y + 40000)$
c_6, c_9	$((y - 1)^3)(y^{78} - 44y^{77} + \dots - 59401y + 625)$
c_7	$625(25y^3 - 61y^2 + 14y - 1)$ $\cdot (25y^{78} + 186y^{77} + \dots + 726960y + 108241)$
c_8	$625(25y^3 - 6y^2 - 7y - 1)$ $\cdot (25y^{78} - 499y^{77} + \dots - 20167623y + 2047761)$
c_{11}	$(y^3 - 5y^2 + 10y - 1)(y^{78} + 26y^{77} + \dots - 3.91693 \times 10^7y + 1.62006 \times 10^7)$