$12a_{0860}$ $(K12a_{0860})$

A knot diagram[1]

Linearized knot diagam

$$\rightarrow \downarrow \rightarrow \uparrow \rightarrow \downarrow \rightarrow \uparrow \rightarrow \uparrow \rightarrow \uparrow \rightarrow \uparrow \rightarrow \downarrow \rightarrow \uparrow \rightarrow \uparrow \rightarrow \uparrow \rightarrow$$

$$\quad 4 \quad 5 \quad 10 \quad 9 \quad 3 \quad 11 \quad 12 \quad 1 \quad 2 \quad 6 \quad 8 \quad 7$$

Solving Sequence

$$8,11 \underset{c_{11}}{\rightarrow} 12 \underset{c_7}{\rightarrow} 7 \underset{c_{12}}{\rightarrow} 1,4 \underset{c_1}{\rightarrow} 2 \underset{c_8}{\rightarrow} 9 \underset{c_6}{\rightarrow} 6 \underset{c_{10}}{\rightarrow} 10 \underset{c_3}{\rightarrow} 3 \underset{c_5}{\rightarrow} 5 \longrightarrow\!\!\!\!\rightarrow c_2, c_4, c_9$$
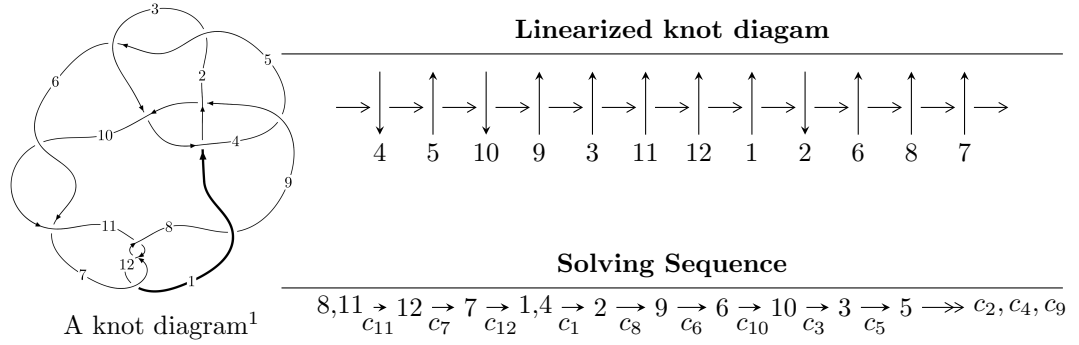
Ideals for irreducible components[2] of $X_{\mathbf{par}}$

$I_1^u = \langle -5.29007 \times 10^{24} u^{76} + 1.01626 \times 10^{25} u^{75} + \cdots + 1.55594 \times 10^{24} b + 8.02867 \times 10^{24},$
$\qquad 8.96223 \times 10^{24} u^{76} - 1.26342 \times 10^{25} u^{75} + \cdots + 1.55594 \times 10^{24} a - 1.05097 \times 10^{25}, \ u^{77} - 2u^{76} + \cdots - 7u + 1\rangle$
$I_2^u = \langle u^2 + b + 1, \ -u^2 + a - 2, \ u^3 - u^2 + 2u - 1\rangle$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 80 representations.

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[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.

$I_1^u = \langle -5.29 \times 10^{24} u^{76} + 1.02 \times 10^{25} u^{75} + \cdots + 1.56 \times 10^{24} b + 8.03 \times 10^{24}, \; 8.96 \times 10^{24} u^{76} - 1.26 \times 10^{25} u^{75} + \cdots + 1.56 \times 10^{24} a - 1.05 \times 10^{25}, \; u^{77} - 2u^{76} + \cdots - 7u + 1 \rangle$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -5.76000u^{76} + 8.11999u^{75} + \cdots - 49.9977u + 6.75457 \\ 3.39991u^{76} - 6.53146u^{75} + \cdots + 29.1654u - 5.16000 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.200000u^{76} + 0.0000233782u^{75} + \cdots - 1.10414u - 0.722387 \\ -0.400023u^{76} - 0.0418941u^{75} + \cdots - 0.677613u + 0.200000 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^5 + 2u^3 + u \\ -u^7 - 3u^5 - 2u^3 + u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^6 - 3u^4 - 2u^2 + 1 \\ u^6 + 2u^4 + u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -4.16000u^{76} + 4.92014u^{75} + \cdots - 30.5063u + 3.54293 \\ 3.60000u^{76} - 6.98916u^{75} + \cdots + 37.6171u - 6.96000 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -3.96000u^{76} + 4.71990u^{75} + \cdots - 32.2944u + 3.21217 \\ 3.40001u^{76} - 6.65993u^{75} + \cdots + 37.1478u - 6.76000 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{3942865327411301334369089 8}{15559428721147808338996 09} u^{76} - \frac{6242655405806426009823249 8}{15559428721147808338996 09} u^{75} + \cdots + \frac{51316621614249561129546035 9}{15559428721147808338996 09} u - \frac{100110429527755677393611749}{15559428721147808338996 09}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{77} - 13u^{76} + \cdots + 20u + 8$
c_2, c_5	$u^{77} + 4u^{76} + \cdots - 14u + 1$
c_3	$u^{77} + u^{76} + \cdots + 887410u + 302321$
c_4	$u^{77} + 3u^{76} + \cdots - 1548u + 181$
c_6, c_8, c_{10}	$u^{77} + 2u^{76} + \cdots - 147u + 17$
c_7, c_{11}, c_{12}	$u^{77} - 2u^{76} + \cdots - 7u + 1$
c_9	$u^{77} - 2u^{76} + \cdots - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{77} + 21y^{76} + \cdots - 432y - 64$
c_2, c_5	$y^{77} - 62y^{76} + \cdots + 26y - 1$
c_3	$y^{77} - 33y^{76} + \cdots - 1941705110116y - 91397987041$
c_4	$y^{77} - 101y^{76} + \cdots + 3284652y - 32761$
c_6, c_8, c_{10}	$y^{77} - 84y^{76} + \cdots - 4639y - 289$
c_7, c_{11}, c_{12}	$y^{77} + 60y^{76} + \cdots + y - 1$
c_9	$y^{77} + 12y^{76} + \cdots + y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.913802 + 0.063108I$ $a = 0.33472 - 1.92033I$ $b = -0.27119 + 1.94599I$	$13.03970 - 3.23619I$	$15.5734 + 0.I$
$u = -0.913802 - 0.063108I$ $a = 0.33472 + 1.92033I$ $b = -0.27119 - 1.94599I$	$13.03970 + 3.23619I$	$15.5734 + 0.I$
$u = 0.906595 + 0.055280I$ $a = 0.34629 - 3.14143I$ $b = -0.32424 + 3.20304I$	$13.6932 + 11.6268I$	$13.0485 - 6.1237I$
$u = 0.906595 - 0.055280I$ $a = 0.34629 + 3.14143I$ $b = -0.32424 - 3.20304I$	$13.6932 - 11.6268I$	$13.0485 + 6.1237I$
$u = -0.326996 + 0.842532I$ $a = -0.541376 + 0.646495I$ $b = 0.402390 - 0.782201I$	$3.66083 + 4.79876I$	0
$u = -0.326996 - 0.842532I$ $a = -0.541376 - 0.646495I$ $b = 0.402390 + 0.782201I$	$3.66083 - 4.79876I$	0
$u = 0.894206 + 0.008927I$ $a = 1.91536 + 2.58709I$ $b = -1.44994 - 2.51862I$	$12.52080 + 2.21530I$	$17.1121 - 3.0542I$
$u = 0.894206 - 0.008927I$ $a = 1.91536 - 2.58709I$ $b = -1.44994 + 2.51862I$	$12.52080 - 2.21530I$	$17.1121 + 3.0542I$
$u = 0.887210 + 0.029674I$ $a = -0.78127 + 3.57061I$ $b = 0.65963 - 3.44289I$	$8.27458 + 5.48443I$	$11.67244 - 5.84044I$
$u = 0.887210 - 0.029674I$ $a = -0.78127 - 3.57061I$ $b = 0.65963 + 3.44289I$	$8.27458 - 5.48443I$	$11.67244 + 5.84044I$

5

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.054607 + 1.112520I$ $a = 0.513405 - 1.069200I$ $b = -0.660143 + 0.296254I$	$-1.43943 + 1.45452I$	0
$u = -0.054607 - 1.112520I$ $a = 0.513405 + 1.069200I$ $b = -0.660143 - 0.296254I$	$-1.43943 - 1.45452I$	0
$u = -0.882807$ $a = 2.61824$ $b = -3.54585$	9.90045	-3.11330
$u = -0.874751 + 0.019237I$ $a = -0.76012 + 2.37591I$ $b = 0.95744 - 2.48019I$	$7.97257 - 1.22260I$	$10.90582 - 1.45578I$
$u = -0.874751 - 0.019237I$ $a = -0.76012 - 2.37591I$ $b = 0.95744 + 2.48019I$	$7.97257 + 1.22260I$	$10.90582 + 1.45578I$
$u = 0.361283 + 0.751844I$ $a = -0.295918 + 0.495393I$ $b = 0.171946 - 0.640949I$	$3.46003 + 4.32392I$	$11.42298 - 6.33256I$
$u = 0.361283 - 0.751844I$ $a = -0.295918 - 0.495393I$ $b = 0.171946 + 0.640949I$	$3.46003 - 4.32392I$	$11.42298 + 6.33256I$
$u = -0.183088 + 1.165940I$ $a = -0.266992 - 0.369562I$ $b = -1.37755 + 1.07744I$	$1.26375 - 1.05598I$	0
$u = -0.183088 - 1.165940I$ $a = -0.266992 + 0.369562I$ $b = -1.37755 - 1.07744I$	$1.26375 + 1.05598I$	0
$u = 0.092580 + 1.209120I$ $a = 0.10678 - 1.57343I$ $b = -1.35466 + 0.92333I$	$-1.84582 + 1.52815I$	0

	Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.092580 - 1.209120I$		
$a =$	$0.10678 + 1.57343I$	$-1.84582 - 1.52815I$	0
$b =$	$-1.35466 - 0.92333I$		
$u =$	$0.161416 + 1.229950I$		
$a =$	$0.15681 + 2.49802I$	$-1.14368 + 2.23292I$	0
$b =$	$3.50115 - 1.48373I$		
$u =$	$0.161416 - 1.229950I$		
$a =$	$0.15681 - 2.49802I$	$-1.14368 - 2.23292I$	0
$b =$	$3.50115 + 1.48373I$		
$u =$	$-0.210827 + 1.234980I$		
$a =$	$-0.754554 + 0.782417I$	$0.54834 - 4.47323I$	0
$b =$	$-0.430198 + 0.502926I$		
$u =$	$-0.210827 - 1.234980I$		
$a =$	$-0.754554 - 0.782417I$	$0.54834 + 4.47323I$	0
$b =$	$-0.430198 - 0.502926I$		
$u =$	$0.658448 + 0.323972I$		
$a =$	$0.751995 + 0.291567I$	$4.80945 - 0.45159I$	$15.7916 + 0.4639I$
$b =$	$0.029394 - 0.146081I$		
$u =$	$0.658448 - 0.323972I$		
$a =$	$0.751995 - 0.291567I$	$4.80945 + 0.45159I$	$15.7916 - 0.4639I$
$b =$	$0.029394 + 0.146081I$		
$u =$	$0.150237 + 1.273730I$		
$a =$	$0.526714 + 0.048722I$	$-3.21431 + 2.39962I$	0
$b =$	$-0.812204 - 0.549214I$		
$u =$	$0.150237 - 1.273730I$		
$a =$	$0.526714 - 0.048722I$	$-3.21431 - 2.39962I$	0
$b =$	$-0.812204 + 0.549214I$		
$u =$	$-0.658985 + 0.265213I$		
$a =$	$-0.49122 + 1.57510I$	$5.38906 - 8.57192I$	$11.9706 + 8.1913I$
$b =$	$-0.125247 - 0.445150I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.658985 - 0.265213I$ $a = -0.49122 - 1.57510I$ $b = -0.125247 + 0.445150I$	$5.38906 + 8.57192I$	$11.9706 - 8.1913I$
$u = 0.698912$ $a = -1.05888$ $b = 0.453650$	1.62149	4.73710
$u = -0.028016 + 1.301540I$ $a = 0.256976 + 0.051421I$ $b = 1.053210 - 0.861329I$	$-5.86592 + 1.11778I$	0
$u = -0.028016 - 1.301540I$ $a = 0.256976 - 0.051421I$ $b = 1.053210 + 0.861329I$	$-5.86592 - 1.11778I$	0
$u = 0.289500 + 1.270280I$ $a = 0.234588 - 0.583710I$ $b = -0.548186 + 0.321533I$	$-2.33279 + 3.56920I$	0
$u = 0.289500 - 1.270280I$ $a = 0.234588 + 0.583710I$ $b = -0.548186 - 0.321533I$	$-2.33279 - 3.56920I$	0
$u = -0.198314 + 1.296690I$ $a = -0.502123 + 0.738377I$ $b = 0.980901 - 0.670423I$	$-3.85925 - 6.47132I$	0
$u = -0.198314 - 1.296690I$ $a = -0.502123 - 0.738377I$ $b = 0.980901 + 0.670423I$	$-3.85925 + 6.47132I$	0
$u = -0.462815 + 1.228630I$ $a = 1.063350 - 0.751492I$ $b = 0.73021 + 1.61220I$	$9.44703 - 1.66736I$	0
$u = -0.462815 - 1.228630I$ $a = 1.063350 + 0.751492I$ $b = 0.73021 - 1.61220I$	$9.44703 + 1.66736I$	0

Solutions to I_1^u		$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.453502 + 1.234510I$		
$a =$	$-2.00885 - 0.56842I$	$10.05520 - 6.77668I$	0
$b =$	$-0.42347 + 2.73870I$		
$u =$	$0.453502 - 1.234510I$		
$a =$	$-2.00885 + 0.56842I$	$10.05520 + 6.77668I$	0
$b =$	$-0.42347 - 2.73870I$		
$u =$	$0.426332 + 1.253220I$		
$a =$	$2.34854 + 0.48663I$	$4.48799 - 0.78739I$	0
$b =$	$0.11887 - 3.15154I$		
$u =$	$0.426332 - 1.253220I$		
$a =$	$2.34854 - 0.48663I$	$4.48799 + 0.78739I$	0
$b =$	$0.11887 + 3.15154I$		
$u =$	$-0.413163 + 1.260620I$		
$a =$	$-1.26088 + 1.13233I$	$4.12598 - 3.38895I$	0
$b =$	$-1.70921 - 1.82672I$		
$u =$	$-0.413163 - 1.260620I$		
$a =$	$-1.26088 - 1.13233I$	$4.12598 + 3.38895I$	0
$b =$	$-1.70921 + 1.82672I$		
$u =$	$0.427750 + 1.273090I$		
$a =$	$0.95805 + 1.80831I$	$8.59850 + 2.51088I$	0
$b =$	$1.99298 - 2.44923I$		
$u =$	$0.427750 - 1.273090I$		
$a =$	$0.95805 - 1.80831I$	$8.59850 - 2.51088I$	0
$b =$	$1.99298 + 2.44923I$		
$u =$	$-0.416478 + 1.278250I$		
$a =$	$-0.43242 - 1.68397I$	$5.93001 - 4.65047I$	0
$b =$	$3.25434 - 1.51855I$		
$u =$	$-0.416478 - 1.278250I$		
$a =$	$-0.43242 + 1.68397I$	$5.93001 + 4.65047I$	0
$b =$	$3.25434 + 1.51855I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.406803 + 1.291700I$ $a = 1.52766 - 0.20602I$ $b = -0.06857 + 2.76086I$	$3.89118 - 5.81428I$	0
$u = -0.406803 - 1.291700I$ $a = 1.52766 + 0.20602I$ $b = -0.06857 - 2.76086I$	$3.89118 + 5.81428I$	0
$u = 0.423725 + 1.287430I$ $a = -2.12946 + 0.38318I$ $b = 0.97652 + 2.37850I$	$8.49017 + 6.92911I$	0
$u = 0.423725 - 1.287430I$ $a = -2.12946 - 0.38318I$ $b = 0.97652 - 2.37850I$	$8.49017 - 6.92911I$	0
$u = 0.414262 + 1.301330I$ $a = -1.85647 - 1.47317I$ $b = -1.45440 + 3.42200I$	$4.12642 + 10.14420I$	0
$u = 0.414262 - 1.301330I$ $a = -1.85647 + 1.47317I$ $b = -1.45440 - 3.42200I$	$4.12642 - 10.14420I$	0
$u = -0.235156 + 1.346920I$ $a = 0.733057 - 0.616515I$ $b = -0.596383 + 0.773379I$	$0.32118 - 11.71550I$	0
$u = -0.235156 - 1.346920I$ $a = 0.733057 + 0.616515I$ $b = -0.596383 - 0.773379I$	$0.32118 + 11.71550I$	0
$u = 0.026010 + 1.380640I$ $a = 0.0205117 + 0.0989125I$ $b = -0.763915 + 0.702888I$	$-3.00730 + 4.91043I$	0
$u = 0.026010 - 1.380640I$ $a = 0.0205117 - 0.0989125I$ $b = -0.763915 - 0.702888I$	$-3.00730 - 4.91043I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.421371 + 1.322560I$		
$a = 1.76986 + 1.12258I$	$9.3880 + 16.3776I$	0
$b = 1.11872 - 3.28566I$		
$u = 0.421371 - 1.322560I$		
$a = 1.76986 - 1.12258I$	$9.3880 - 16.3776I$	0
$b = 1.11872 + 3.28566I$		
$u = -0.424789 + 1.329390I$		
$a = -1.208660 + 0.425059I$	$8.68598 - 8.02392I$	0
$b = -0.22264 - 1.99964I$		
$u = -0.424789 - 1.329390I$		
$a = -1.208660 - 0.425059I$	$8.68598 + 8.02392I$	0
$b = -0.22264 + 1.99964I$		
$u = 0.220478 + 1.386360I$		
$a = -0.368808 + 0.007896I$	$-0.63581 + 2.62873I$	0
$b = 0.224428 - 0.133536I$		
$u = 0.220478 - 1.386360I$		
$a = -0.368808 - 0.007896I$	$-0.63581 - 2.62873I$	0
$b = 0.224428 + 0.133536I$		
$u = -0.539636 + 0.187893I$		
$a = 0.42741 - 1.76367I$	$0.70764 - 3.84105I$	$9.38498 + 8.87377I$
$b = -0.1137720 + 0.0518232I$		
$u = -0.539636 - 0.187893I$		
$a = 0.42741 + 1.76367I$	$0.70764 + 3.84105I$	$9.38498 - 8.87377I$
$b = -0.1137720 - 0.0518232I$		
$u = -0.562693 + 0.059383I$		
$a = 0.091377 - 1.045750I$	$4.44931 - 1.68114I$	$17.9349 + 4.6378I$
$b = 0.903662 - 0.072790I$		
$u = -0.562693 - 0.059383I$		
$a = 0.091377 + 1.045750I$	$4.44931 + 1.68114I$	$17.9349 - 4.6378I$
$b = 0.903662 + 0.072790I$		

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.454776 + 0.112651I$ $a = -1.42735 - 0.78385I$ $b = 0.373505 + 0.219026I$	$0.990921 + 0.275354I$	$10.83194 - 1.70107I$
$u = 0.454776 - 0.112651I$ $a = -1.42735 + 0.78385I$ $b = 0.373505 - 0.219026I$	$0.990921 - 0.275354I$	$10.83194 + 1.70107I$
$u = 0.459569$ $a = 7.65144$ $b = -3.15496$	2.54686	-58.3700
$u = -0.057935 + 0.430382I$ $a = 0.260550 - 0.991074I$ $b = -0.548092 + 0.409420I$	$-0.85332 + 1.45234I$	$1.68280 - 2.85990I$
$u = -0.057935 - 0.430382I$ $a = 0.260550 + 0.991074I$ $b = -0.548092 - 0.409420I$	$-0.85332 - 1.45234I$	$1.68280 + 2.85990I$
$u = 0.161338 + 0.194044I$ $a = -4.36295 + 0.20562I$ $b = 0.428285 + 0.893678I$	$1.94471 + 0.63814I$	$4.71193 + 1.24447I$
$u = 0.161338 - 0.194044I$ $a = -4.36295 - 0.20562I$ $b = 0.428285 - 0.893678I$	$1.94471 - 0.63814I$	$4.71193 - 1.24447I$

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

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u \\ u^2 - u + 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + 1 \\ -u^2 + u - 1 \end{pmatrix}$$

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

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 1 \\ -u^2 - 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 7u^2 - 5u + 17$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

	Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.215080 + 1.307140I$		
$a =$	$0.337641 + 0.562280I$	$-1.37919 + 2.82812I$	$4.28809 - 2.59975I$
$b =$	$0.662359 - 0.562280I$		
$u =$	$0.215080 - 1.307140I$		
$a =$	$0.337641 - 0.562280I$	$-1.37919 - 2.82812I$	$4.28809 + 2.59975I$
$b =$	$0.662359 + 0.562280I$		
$u =$	0.569840		
$a =$	2.32472	2.75839	16.4240
$b =$	-1.32472		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^3(u^{77} - 13u^{76} + \cdots + 20u + 8)$
c_2	$((u+1)^3)(u^{77} + 4u^{76} + \cdots - 14u + 1)$
c_3	$(u^3 - u - 1)(u^{77} + u^{76} + \cdots + 887410u + 302321)$
c_4	$(u^3 - u - 1)(u^{77} + 3u^{76} + \cdots - 1548u + 181)$
c_5	$((u-1)^3)(u^{77} + 4u^{76} + \cdots - 14u + 1)$
c_6, c_8	$(u^3 - u^2 + 1)(u^{77} + 2u^{76} + \cdots - 147u + 17)$
c_7	$(u^3 + u^2 + 2u + 1)(u^{77} - 2u^{76} + \cdots - 7u + 1)$
c_9	$(u^3 - u^2 + 1)(u^{77} - 2u^{76} + \cdots - u + 1)$
c_{10}	$(u^3 + u^2 - 1)(u^{77} + 2u^{76} + \cdots - 147u + 17)$
c_{11}, c_{12}	$(u^3 - u^2 + 2u - 1)(u^{77} - 2u^{76} + \cdots - 7u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^3(y^{77} + 21y^{76} + \cdots - 432y - 64)$
c_2, c_5	$((y-1)^3)(y^{77} - 62y^{76} + \cdots + 26y - 1)$
c_3	$(y^3 - 2y^2 + y - 1)$ $\cdot (y^{77} - 33y^{76} + \cdots - 1941705110116y - 91397987041)$
c_4	$(y^3 - 2y^2 + y - 1)(y^{77} - 101y^{76} + \cdots + 3284652y - 32761)$
c_6, c_8, c_{10}	$(y^3 - y^2 + 2y - 1)(y^{77} - 84y^{76} + \cdots - 4639y - 289)$
c_7, c_{11}, c_{12}	$(y^3 + 3y^2 + 2y - 1)(y^{77} + 60y^{76} + \cdots + y - 1)$
c_9	$(y^3 - y^2 + 2y - 1)(y^{77} + 12y^{76} + \cdots + y - 1)$