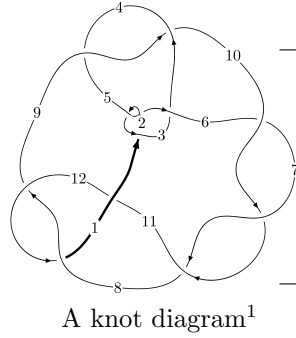
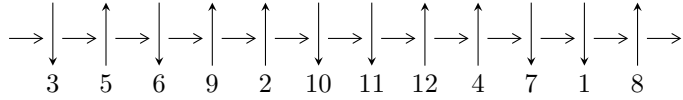


12a₀₀₁₈ (K12a₀₀₁₈)



Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -2.11930 \times 10^{181} u^{84} - 3.51393 \times 10^{181} u^{83} + \dots + 4.67589 \times 10^{182} b - 7.31431 \times 10^{181}, \\ -1.07455 \times 10^{183} u^{84} - 2.39844 \times 10^{183} u^{83} + \dots + 6.82681 \times 10^{183} a + 9.14213 \times 10^{183}, \\ u^{85} + 3u^{84} + \dots - 68u + 73 \rangle$$

$$I_2^u = \langle b - a - 1, a^2 + a + 1, u^5 + u^4 - 2u^3 - u^2 + u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 95 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.

$$\mathbf{I. } I_1^u = \langle -2.12 \times 10^{181} u^{84} - 3.51 \times 10^{181} u^{83} + \dots + 4.68 \times 10^{182} b - 7.31 \times 10^{181}, -1.07 \times 10^{183} u^{84} - 2.40 \times 10^{183} u^{83} + \dots + 6.83 \times 10^{183} a + 9.14 \times 10^{183}, u^{85} + 3u^{84} + \dots - 68u + 73 \rangle$$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

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

$$a_2 = \begin{pmatrix} 0.157402u^{84} + 0.351327u^{83} + \dots - 11.2870u - 1.33915 \\ 0.0453239u^{84} + 0.0751498u^{83} + \dots - 5.90882u + 0.156426 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.0973095u^{84} - 0.243071u^{83} + \dots + 12.7128u + 2.17784 \\ -0.0386728u^{84} - 0.0840276u^{83} + \dots + 7.17860u + 1.28714 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.108861u^{84} + 0.277515u^{83} + \dots + 0.921763u - 2.89582 \\ 0.0594798u^{84} + 0.134387u^{83} + \dots - 4.79958u - 2.53940 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0493808u^{84} + 0.143127u^{83} + \dots + 5.72134u - 0.356420 \\ 0.0594798u^{84} + 0.134387u^{83} + \dots - 4.79958u - 2.53940 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0447060u^{84} + 0.145350u^{83} + \dots - 11.0547u - 5.38827 \\ -0.0550150u^{84} - 0.0997524u^{83} + \dots + 2.36727u - 0.651555 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.00892540u^{84} + 0.0282388u^{83} + \dots + 11.2989u - 1.76034 \\ -0.0540602u^{84} - 0.0446167u^{83} + \dots + 2.04432u - 7.27963 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.116080u^{84} + 0.273107u^{83} + \dots - 17.9315u - 4.58050 \\ -0.0000810727u^{84} - 0.00974982u^{83} + \dots - 2.36092u + 0.624367 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-0.0954738u^{84} - 0.244184u^{83} + \dots - 10.0507u - 7.23539$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{85} + 44u^{84} + \dots - 7u - 1$
c_2, c_5	$u^{85} + 6u^{84} + \dots - 7u - 1$
c_3	$u^{85} - 6u^{84} + \dots + 20709u - 4073$
c_4, c_9	$u^{85} + u^{84} + \dots + 2048u + 1024$
c_6, c_7, c_{10}	$u^{85} + 3u^{84} + \dots - 68u + 73$
c_8, c_{12}	$u^{85} - 3u^{84} + \dots - 2u + 1$
c_{11}	$u^{85} + 49u^{84} + \dots - 8u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{85} + 88y^{83} + \dots - 31y - 1$
c_2, c_5	$y^{85} + 44y^{84} + \dots - 7y - 1$
c_3	$y^{85} - 44y^{84} + \dots - 163840279y - 16589329$
c_4, c_9	$y^{85} + 55y^{84} + \dots - 20971520y - 1048576$
c_6, c_7, c_{10}	$y^{85} - 95y^{84} + \dots + 44336y - 5329$
c_8, c_{12}	$y^{85} + 49y^{84} + \dots - 8y - 1$
c_{11}	$y^{85} - 23y^{84} + \dots - 36y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.073727 + 0.986667I$ $a = 0.936097 - 0.544165I$ $b = -0.476518 - 1.115450I$	$-2.14101 + 5.91470I$	0
$u = -0.073727 - 0.986667I$ $a = 0.936097 + 0.544165I$ $b = -0.476518 + 1.115450I$	$-2.14101 - 5.91470I$	0
$u = -0.664796 + 0.770883I$ $a = 1.38906 - 1.12816I$ $b = -0.517064 - 1.146120I$	$-3.42165 + 7.23133I$	0
$u = -0.664796 - 0.770883I$ $a = 1.38906 + 1.12816I$ $b = -0.517064 + 1.146120I$	$-3.42165 - 7.23133I$	0
$u = -0.319887 + 0.971190I$ $a = 0.524620 + 0.488014I$ $b = -0.441470 + 1.103310I$	$-2.42258 - 1.55579I$	0
$u = -0.319887 - 0.971190I$ $a = 0.524620 - 0.488014I$ $b = -0.441470 - 1.103310I$	$-2.42258 + 1.55579I$	0
$u = -0.849401 + 0.579207I$ $a = -0.146968 + 0.900614I$ $b = -0.360653 + 1.131480I$	$-4.52915 - 0.73034I$	0
$u = -0.849401 - 0.579207I$ $a = -0.146968 - 0.900614I$ $b = -0.360653 - 1.131480I$	$-4.52915 + 0.73034I$	0
$u = -0.810927 + 0.493483I$ $a = -0.86574 + 2.36356I$ $b = 0.493182 + 1.063790I$	$-2.34026 + 6.33705I$	0
$u = -0.810927 - 0.493483I$ $a = -0.86574 - 2.36356I$ $b = 0.493182 - 1.063790I$	$-2.34026 - 6.33705I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.607526 + 0.641631I$ $a = 0.329627 - 0.477034I$ $b = -0.707421 + 0.221133I$	$-0.75202 + 2.57285I$	0
$u = -0.607526 - 0.641631I$ $a = 0.329627 + 0.477034I$ $b = -0.707421 - 0.221133I$	$-0.75202 - 2.57285I$	0
$u = 0.680815 + 0.531192I$ $a = -0.475784 - 0.021071I$ $b = 0.656015 - 0.711309I$	$-0.52068 - 4.98776I$	$0. + 10.01892I$
$u = 0.680815 - 0.531192I$ $a = -0.475784 + 0.021071I$ $b = 0.656015 + 0.711309I$	$-0.52068 + 4.98776I$	$0. - 10.01892I$
$u = 0.947774 + 0.683916I$ $a = 0.056456 + 0.361169I$ $b = -0.766931 - 0.259594I$	$-2.68653 - 6.83343I$	0
$u = 0.947774 - 0.683916I$ $a = 0.056456 - 0.361169I$ $b = -0.766931 + 0.259594I$	$-2.68653 + 6.83343I$	0
$u = -0.612245 + 0.547885I$ $a = 0.732372 + 0.265000I$ $b = 0.473509 - 0.307517I$	$-0.28355 + 2.24163I$	$0. - 4.15869I$
$u = -0.612245 - 0.547885I$ $a = 0.732372 - 0.265000I$ $b = 0.473509 + 0.307517I$	$-0.28355 - 2.24163I$	$0. + 4.15869I$
$u = -0.426296 + 0.697949I$ $a = 0.918803 - 0.215162I$ $b = -0.272552 - 0.382600I$	$-0.09111 + 1.93411I$	$0. - 2.82382I$
$u = -0.426296 - 0.697949I$ $a = 0.918803 + 0.215162I$ $b = -0.272552 + 0.382600I$	$-0.09111 - 1.93411I$	$0. + 2.82382I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.081024 + 0.790295I$ $a = 0.754750 - 0.090029I$ $b = -0.514454 + 0.225014I$	$0.35550 + 1.80819I$	$1.92357 - 4.64833I$
$u = -0.081024 - 0.790295I$ $a = 0.754750 + 0.090029I$ $b = -0.514454 - 0.225014I$	$0.35550 - 1.80819I$	$1.92357 + 4.64833I$
$u = -1.212560 + 0.159917I$ $a = 0.983042 - 0.860730I$ $b = -0.215414 - 0.748399I$	$-2.86425 + 1.08010I$	0
$u = -1.212560 - 0.159917I$ $a = 0.983042 + 0.860730I$ $b = -0.215414 + 0.748399I$	$-2.86425 - 1.08010I$	0
$u = 1.114220 + 0.566791I$ $a = -0.040385 - 1.282380I$ $b = -0.304170 - 1.134360I$	$-6.91731 - 3.67064I$	0
$u = 1.114220 - 0.566791I$ $a = -0.040385 + 1.282380I$ $b = -0.304170 + 1.134360I$	$-6.91731 + 3.67064I$	0
$u = 1.000140 + 0.768979I$ $a = 1.20857 + 1.42294I$ $b = -0.540479 + 1.152630I$	$-5.31540 - 11.73820I$	0
$u = 1.000140 - 0.768979I$ $a = 1.20857 - 1.42294I$ $b = -0.540479 - 1.152630I$	$-5.31540 + 11.73820I$	0
$u = 0.701004 + 0.167089I$ $a = -1.04043 - 0.96974I$ $b = -0.384455 - 1.189130I$	$-8.68594 + 3.54169I$	$-10.91031 - 3.61355I$
$u = 0.701004 - 0.167089I$ $a = -1.04043 + 0.96974I$ $b = -0.384455 + 1.189130I$	$-8.68594 - 3.54169I$	$-10.91031 + 3.61355I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.566939 + 0.421860I$ $a = -1.063890 + 0.895906I$ $b = 0.625120 + 0.883968I$	$-1.019110 - 0.019860I$	$-7.10656 + 3.63163I$
$u = 0.566939 - 0.421860I$ $a = -1.063890 - 0.895906I$ $b = 0.625120 - 0.883968I$	$-1.019110 + 0.019860I$	$-7.10656 - 3.63163I$
$u = 1.324570 + 0.153827I$ $a = 0.888954 - 1.043400I$ $b = -0.219128 - 0.834236I$	$-6.48791 - 3.11039I$	0
$u = 1.324570 - 0.153827I$ $a = 0.888954 + 1.043400I$ $b = -0.219128 + 0.834236I$	$-6.48791 + 3.11039I$	0
$u = -0.629066 + 0.209720I$ $a = -0.61598 - 3.22202I$ $b = 0.372593 - 1.046640I$	$-3.20124 - 0.40319I$	$-7.42049 + 0.02513I$
$u = -0.629066 - 0.209720I$ $a = -0.61598 + 3.22202I$ $b = 0.372593 + 1.046640I$	$-3.20124 + 0.40319I$	$-7.42049 - 0.02513I$
$u = 0.162545 + 0.544040I$ $a = 0.451845 - 0.799524I$ $b = 0.472309 + 0.536803I$	$0.99323 + 1.21291I$	$4.59661 - 3.40071I$
$u = 0.162545 - 0.544040I$ $a = 0.451845 + 0.799524I$ $b = 0.472309 - 0.536803I$	$0.99323 - 1.21291I$	$4.59661 + 3.40071I$
$u = -1.45267$ $a = 0.691122$ $b = 0.654332$	-3.81338	0
$u = -0.191578 + 0.506538I$ $a = -0.351792 - 0.699095I$ $b = 0.549301 + 0.652031I$	$0.95141 + 1.54224I$	$3.64572 - 4.77993I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.191578 - 0.506538I$ $a = -0.351792 + 0.699095I$ $b = 0.549301 - 0.652031I$	$0.95141 - 1.54224I$	$3.64572 + 4.77993I$
$u = 0.524049 + 0.111794I$ $a = -0.076692 + 1.324640I$ $b = -0.776293 - 0.119585I$	$-4.80858 - 0.38289I$	$-6.98989 - 0.09954I$
$u = 0.524049 - 0.111794I$ $a = -0.076692 - 1.324640I$ $b = -0.776293 + 0.119585I$	$-4.80858 + 0.38289I$	$-6.98989 + 0.09954I$
$u = 0.475918 + 0.244964I$ $a = 2.65951 + 1.54249I$ $b = -0.495221 + 1.182570I$	$-7.91886 - 5.05331I$	$-9.98522 + 3.52204I$
$u = 0.475918 - 0.244964I$ $a = 2.65951 - 1.54249I$ $b = -0.495221 - 1.182570I$	$-7.91886 + 5.05331I$	$-9.98522 - 3.52204I$
$u = 1.47833 + 0.03589I$ $a = -0.405383 - 0.632644I$ $b = 0.744958 - 0.816857I$	$-4.46882 - 2.78743I$	0
$u = 1.47833 - 0.03589I$ $a = -0.405383 + 0.632644I$ $b = 0.744958 + 0.816857I$	$-4.46882 + 2.78743I$	0
$u = 0.408053 + 0.323773I$ $a = -1.44582 - 2.40333I$ $b = 0.478977 - 0.992998I$	$-0.32720 - 2.78409I$	$1.83631 + 3.63493I$
$u = 0.408053 - 0.323773I$ $a = -1.44582 + 2.40333I$ $b = 0.478977 + 0.992998I$	$-0.32720 + 2.78409I$	$1.83631 - 3.63493I$
$u = 1.45414 + 0.29131I$ $a = 0.852958 + 0.820806I$ $b = -0.278597 + 0.750241I$	$-6.17711 - 5.61767I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.45414 - 0.29131I$ $a = 0.852958 - 0.820806I$ $b = -0.278597 - 0.750241I$	$-6.17711 + 5.61767I$	0
$u = 0.022495 + 0.486505I$ $a = -1.48819 - 1.58315I$ $b = 0.545824 - 0.945362I$	$0.07724 - 2.86484I$	$1.199969 - 0.242830I$
$u = 0.022495 - 0.486505I$ $a = -1.48819 + 1.58315I$ $b = 0.545824 + 0.945362I$	$0.07724 + 2.86484I$	$1.199969 + 0.242830I$
$u = -1.53385 + 0.07020I$ $a = -0.40293 + 2.49379I$ $b = 0.449202 + 1.155340I$	$-6.96879 + 4.07852I$	0
$u = -1.53385 - 0.07020I$ $a = -0.40293 - 2.49379I$ $b = 0.449202 - 1.155340I$	$-6.96879 - 4.07852I$	0
$u = -1.55923 + 0.08103I$ $a = 0.92915 - 2.02619I$ $b = -0.566136 - 1.204640I$	$-14.9606 + 6.2710I$	0
$u = -1.55923 - 0.08103I$ $a = 0.92915 + 2.02619I$ $b = -0.566136 + 1.204640I$	$-14.9606 - 6.2710I$	0
$u = -1.56350 + 0.03748I$ $a = -0.427946 - 0.305316I$ $b = -0.892662 + 0.229621I$	$-12.01330 + 0.94589I$	0
$u = -1.56350 - 0.03748I$ $a = -0.427946 + 0.305316I$ $b = -0.892662 - 0.229621I$	$-12.01330 - 0.94589I$	0
$u = -1.56534 + 0.10799I$ $a = -0.397551 - 0.704235I$ $b = 0.751803 - 0.834148I$	$-8.23473 + 1.87606I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.56534 - 0.10799I$		
$a = -0.397551 + 0.704235I$	$-8.23473 - 1.87606I$	0
$b = 0.751803 + 0.834148I$		
$u = 1.56363 + 0.14005I$		
$a = 0.681046 - 0.008951I$	$-7.51475 - 4.66932I$	0
$b = 0.682539 + 0.031873I$		
$u = 1.56363 - 0.14005I$		
$a = 0.681046 + 0.008951I$	$-7.51475 + 4.66932I$	0
$b = 0.682539 - 0.031873I$		
$u = 1.56682 + 0.18662I$		
$a = -0.369496 + 0.287964I$	$-7.97573 - 5.57692I$	0
$b = -0.882048 - 0.243919I$		
$u = 1.56682 - 0.18662I$		
$a = -0.369496 - 0.287964I$	$-7.97573 + 5.57692I$	0
$b = -0.882048 + 0.243919I$		
$u = 1.58824 + 0.06264I$		
$a = -0.35566 + 2.51657I$	$-10.82760 - 0.61758I$	0
$b = 0.437537 + 1.164820I$		
$u = 1.58824 - 0.06264I$		
$a = -0.35566 - 2.51657I$	$-10.82760 + 0.61758I$	0
$b = 0.437537 - 1.164820I$		
$u = -1.59039 + 0.15326I$		
$a = -0.339018 + 0.614653I$	$-8.15394 + 7.51658I$	0
$b = 0.760081 + 0.806878I$		
$u = -1.59039 - 0.15326I$		
$a = -0.339018 - 0.614653I$	$-8.15394 - 7.51658I$	0
$b = 0.760081 - 0.806878I$		
$u = 1.58729 + 0.23058I$		
$a = 0.93005 + 1.93227I$	$-10.8454 - 10.8895I$	0
$b = -0.569612 + 1.196030I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.58729 - 0.23058I$ $a = 0.93005 - 1.93227I$ $b = -0.569612 - 1.196030I$	$-10.8454 + 10.8895I$	0
$u = -1.62598 + 0.02161I$ $a = -0.32812 + 1.91798I$ $b = -0.293102 + 1.265500I$	$-16.8709 - 2.9460I$	0
$u = -1.62598 - 0.02161I$ $a = -0.32812 - 1.91798I$ $b = -0.293102 - 1.265500I$	$-16.8709 + 2.9460I$	0
$u = 1.62231 + 0.13541I$ $a = -0.28106 - 1.88018I$ $b = -0.281969 - 1.256690I$	$-12.85110 - 1.80108I$	0
$u = 1.62231 - 0.13541I$ $a = -0.28106 + 1.88018I$ $b = -0.281969 + 1.256690I$	$-12.85110 + 1.80108I$	0
$u = 1.63560 + 0.15859I$ $a = -0.39129 - 2.44697I$ $b = 0.460557 - 1.163250I$	$-10.66370 - 8.89844I$	0
$u = 1.63560 - 0.15859I$ $a = -0.39129 + 2.44697I$ $b = 0.460557 + 1.163250I$	$-10.66370 + 8.89844I$	0
$u = -1.68732 + 0.22905I$ $a = -0.370876 - 0.238606I$ $b = -0.890810 + 0.256215I$	$-11.5683 + 10.5297I$	0
$u = -1.68732 - 0.22905I$ $a = -0.370876 + 0.238606I$ $b = -0.890810 - 0.256215I$	$-11.5683 - 10.5297I$	0
$u = -1.71267 + 0.17894I$ $a = -0.23914 + 1.90958I$ $b = -0.270919 + 1.263420I$	$-16.5460 + 6.7728I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.71267 - 0.17894I$ $a = -0.23914 - 1.90958I$ $b = -0.270919 - 1.263420I$	$-16.5460 - 6.7728I$	0
$u = -1.71107 + 0.25442I$ $a = 0.86199 - 1.91094I$ $b = -0.577264 - 1.196240I$	$-14.4069 + 15.9000I$	0
$u = -1.71107 - 0.25442I$ $a = 0.86199 + 1.91094I$ $b = -0.577264 + 1.196240I$	$-14.4069 - 15.9000I$	0
$u = -0.170164 + 0.203673I$ $a = 3.62951 + 3.25134I$ $b = 0.214671 + 0.856960I$	$-1.89638 + 1.79583I$	$-7.96923 - 3.85699I$
$u = -0.170164 - 0.203673I$ $a = 3.62951 - 3.25134I$ $b = 0.214671 - 0.856960I$	$-1.89638 - 1.79583I$	$-7.96923 + 3.85699I$

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

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

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

$$a_2 = \begin{pmatrix} a \\ a + 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} a \\ a \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0 \\ a \end{pmatrix}$$

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

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

$$a_{12} = \begin{pmatrix} u^3 - 2u \\ -u^3 + u \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $u^4a + 2u^3a + u^4 - 2u^2a - 2u^3 - 3au - u^2 - 4a + 5u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_5	$(u^2 - u + 1)^5$
c_2	$(u^2 + u + 1)^5$
c_4, c_9	u^{10}
c_6, c_7	$(u^5 + u^4 - 2u^3 - u^2 + u - 1)^2$
c_8	$(u^5 - u^4 + 2u^3 - u^2 + u - 1)^2$
c_{10}	$(u^5 - u^4 - 2u^3 + u^2 + u + 1)^2$
c_{11}	$(u^5 - 3u^4 + 4u^3 - u^2 - u + 1)^2$
c_{12}	$(u^5 + u^4 + 2u^3 + u^2 + u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_5	$(y^2 + y + 1)^5$
c_4, c_9	y^{10}
c_6, c_7, c_{10}	$(y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1)^2$
c_8, c_{12}	$(y^5 + 3y^4 + 4y^3 + y^2 - y - 1)^2$
c_{11}	$(y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.21774$ $a = -0.500000 + 0.866025I$ $b = 0.500000 + 0.866025I$	$-2.40108 + 2.02988I$	$-0.40252 - 4.16430I$
$u = 1.21774$ $a = -0.500000 - 0.866025I$ $b = 0.500000 - 0.866025I$	$-2.40108 - 2.02988I$	$-0.40252 + 4.16430I$
$u = 0.309916 + 0.549911I$ $a = -0.500000 + 0.866025I$ $b = 0.500000 + 0.866025I$	$-0.329100 + 0.499304I$	$0.886311 - 0.883423I$
$u = 0.309916 + 0.549911I$ $a = -0.500000 - 0.866025I$ $b = 0.500000 - 0.866025I$	$-0.32910 - 3.56046I$	$-3.42267 + 7.93863I$
$u = 0.309916 - 0.549911I$ $a = -0.500000 + 0.866025I$ $b = 0.500000 + 0.866025I$	$-0.32910 + 3.56046I$	$-3.42267 - 7.93863I$
$u = 0.309916 - 0.549911I$ $a = -0.500000 - 0.866025I$ $b = 0.500000 - 0.866025I$	$-0.329100 - 0.499304I$	$0.886311 + 0.883423I$
$u = -1.41878 + 0.21917I$ $a = -0.500000 + 0.866025I$ $b = 0.500000 + 0.866025I$	$-5.87256 + 6.43072I$	$-4.19593 - 8.50148I$
$u = -1.41878 + 0.21917I$ $a = -0.500000 - 0.866025I$ $b = 0.500000 - 0.866025I$	$-5.87256 + 2.37095I$	$-2.86519 + 1.02882I$
$u = -1.41878 - 0.21917I$ $a = -0.500000 + 0.866025I$ $b = 0.500000 + 0.866025I$	$-5.87256 - 2.37095I$	$-2.86519 - 1.02882I$
$u = -1.41878 - 0.21917I$ $a = -0.500000 - 0.866025I$ $b = 0.500000 - 0.866025I$	$-5.87256 - 6.43072I$	$-4.19593 + 8.50148I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2 - u + 1)^5)(u^{85} + 44u^{84} + \dots - 7u - 1)$
c_2	$((u^2 + u + 1)^5)(u^{85} + 6u^{84} + \dots - 7u - 1)$
c_3	$((u^2 - u + 1)^5)(u^{85} - 6u^{84} + \dots + 20709u - 4073)$
c_4, c_9	$u^{10}(u^{85} + u^{84} + \dots + 2048u + 1024)$
c_5	$((u^2 - u + 1)^5)(u^{85} + 6u^{84} + \dots - 7u - 1)$
c_6, c_7	$((u^5 + u^4 - 2u^3 - u^2 + u - 1)^2)(u^{85} + 3u^{84} + \dots - 68u + 73)$
c_8	$((u^5 - u^4 + 2u^3 - u^2 + u - 1)^2)(u^{85} - 3u^{84} + \dots - 2u + 1)$
c_{10}	$((u^5 - u^4 - 2u^3 + u^2 + u + 1)^2)(u^{85} + 3u^{84} + \dots - 68u + 73)$
c_{11}	$((u^5 - 3u^4 + 4u^3 - u^2 - u + 1)^2)(u^{85} + 49u^{84} + \dots - 8u - 1)$
c_{12}	$((u^5 + u^4 + 2u^3 + u^2 + u + 1)^2)(u^{85} - 3u^{84} + \dots - 2u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^2 + y + 1)^5)(y^{85} + 88y^{83} + \dots - 31y - 1)$
c_2, c_5	$((y^2 + y + 1)^5)(y^{85} + 44y^{84} + \dots - 7y - 1)$
c_3	$((y^2 + y + 1)^5)(y^{85} - 44y^{84} + \dots - 1.63840 \times 10^8 y - 1.65893 \times 10^7)$
c_4, c_9	$y^{10}(y^{85} + 55y^{84} + \dots - 2.09715 \times 10^7 y - 1048576)$
c_6, c_7, c_{10}	$((y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1)^2)(y^{85} - 95y^{84} + \dots + 44336y - 5329)$
c_8, c_{12}	$((y^5 + 3y^4 + 4y^3 + y^2 - y - 1)^2)(y^{85} + 49y^{84} + \dots - 8y - 1)$
c_{11}	$((y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)^2)(y^{85} - 23y^{84} + \dots - 36y - 1)$