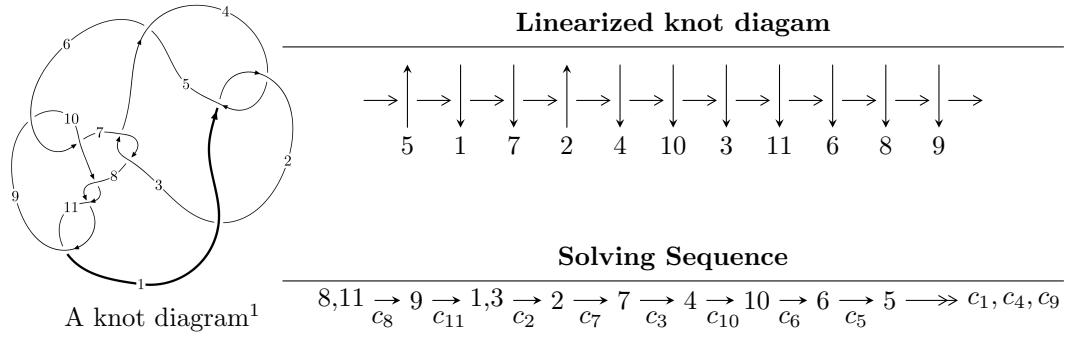


$11a_{49}$ ($K11a_{49}$)



Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 9.01751 \times 10^{36} u^{59} + 5.15573 \times 10^{37} u^{58} + \dots + 2.98614 \times 10^{35} b - 6.79357 \times 10^{36},$$

$$8.91336 \times 10^{36} u^{59} + 4.98175 \times 10^{37} u^{58} + \dots + 2.98614 \times 10^{35} a - 5.40121 \times 10^{36}, u^{60} + 7u^{59} + \dots - 6u - 1 \rangle$$

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

$$I_3^u = \langle b, a^2 + au + 2a + 3u + 5, u^2 + u - 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 68 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.

$$I_1^u = \langle 9.02 \times 10^{36}u^{59} + 5.16 \times 10^{37}u^{58} + \dots + 2.99 \times 10^{35}b - 6.79 \times 10^{36}, \ 8.91 \times 10^{36}u^{59} + 4.98 \times 10^{37}u^{58} + \dots + 2.99 \times 10^{35}a - 5.40 \times 10^{36}, \ u^{60} + 7u^{59} + \dots - 6u - 1 \rangle$$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -29.8491u^{59} - 166.829u^{58} + \dots + 129.411u + 18.0876 \\ -30.1979u^{59} - 172.655u^{58} + \dots + 122.504u + 22.7504 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -38.7260u^{59} - 215.837u^{58} + \dots + 161.430u + 23.9641 \\ -40.2858u^{59} - 229.747u^{58} + \dots + 160.391u + 30.0045 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -35.9915u^{59} - 204.169u^{58} + \dots + 147.701u + 26.5908 \\ -36.2977u^{59} - 209.779u^{58} + \dots + 151.862u + 29.1133 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -37.1833u^{59} - 206.920u^{58} + \dots + 154.103u + 23.9174 \\ -41.6797u^{59} - 236.581u^{58} + \dots + 163.204u + 30.6805 \end{pmatrix}$$

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

$$a_6 = \begin{pmatrix} -25.6472u^{59} - 153.577u^{58} + \dots + 126.598u + 23.1246 \\ -25.9534u^{59} - 159.186u^{58} + \dots + 130.758u + 25.6472 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -23.4754u^{59} - 130.115u^{58} + \dots + 100.960u + 15.9285 \\ -27.6129u^{59} - 156.128u^{58} + \dots + 107.032u + 20.4621 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -23.4754u^{59} - 130.115u^{58} + \dots + 100.960u + 15.9285 \\ -27.6129u^{59} - 156.128u^{58} + \dots + 107.032u + 20.4621 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $50.7022u^{59} + 278.914u^{58} + \dots - 202.739u - 39.8944$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{60} + 4u^{59} + \cdots + 6u + 1$
c_2, c_5	$u^{60} + 20u^{59} + \cdots - 82u + 1$
c_3, c_7	$u^{60} - 2u^{59} + \cdots - 16u + 16$
c_6, c_9	$u^{60} + 3u^{59} + \cdots - 24u - 16$
c_8, c_{10}, c_{11}	$u^{60} - 7u^{59} + \cdots + 6u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{60} + 20y^{59} + \cdots - 82y + 1$
c_2, c_5	$y^{60} + 44y^{59} + \cdots - 7010y + 1$
c_3, c_7	$y^{60} + 30y^{59} + \cdots + 1408y + 256$
c_6, c_9	$y^{60} - 33y^{59} + \cdots - 576y + 256$
c_8, c_{10}, c_{11}	$y^{60} - 57y^{59} + \cdots - 48y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.318501 + 0.946527I$ $a = 0.673424 - 0.443134I$ $b = 0.628475 + 1.190740I$	$3.14485 - 10.38850I$	0
$u = 0.318501 - 0.946527I$ $a = 0.673424 + 0.443134I$ $b = 0.628475 - 1.190740I$	$3.14485 + 10.38850I$	0
$u = 0.260347 + 0.914658I$ $a = -0.502988 + 0.479081I$ $b = -0.548192 - 1.199390I$	$4.15844 - 4.56410I$	0
$u = 0.260347 - 0.914658I$ $a = -0.502988 - 0.479081I$ $b = -0.548192 + 1.199390I$	$4.15844 + 4.56410I$	0
$u = 1.050240 + 0.110830I$ $a = 2.93202 - 0.13396I$ $b = 0.514724 - 0.182101I$	$-1.44417 + 1.61127I$	0
$u = 1.050240 - 0.110830I$ $a = 2.93202 + 0.13396I$ $b = 0.514724 + 0.182101I$	$-1.44417 - 1.61127I$	0
$u = 0.636405 + 0.600822I$ $a = 0.0733025 - 0.0078478I$ $b = 0.618612 - 0.670882I$	$-3.26453 + 0.03248I$	$-13.91224 + 0.I$
$u = 0.636405 - 0.600822I$ $a = 0.0733025 + 0.0078478I$ $b = 0.618612 + 0.670882I$	$-3.26453 - 0.03248I$	$-13.91224 + 0.I$
$u = 1.119040 + 0.184637I$ $a = 1.292300 - 0.042199I$ $b = 0.213622 + 0.675044I$	$-1.23369 - 0.89939I$	0
$u = 1.119040 - 0.184637I$ $a = 1.292300 + 0.042199I$ $b = 0.213622 - 0.675044I$	$-1.23369 + 0.89939I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.387799 + 0.734072I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.750801 - 1.082130I$	$-2.46678 - 4.55995I$	$-10.63324 + 6.84099I$
$b = 0.543968 + 0.934007I$		
$u = 0.387799 - 0.734072I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.750801 + 1.082130I$	$-2.46678 + 4.55995I$	$-10.63324 - 6.84099I$
$b = 0.543968 - 0.934007I$		
$u = -1.182510 + 0.025488I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.149815 + 0.792334I$	$4.58752 + 3.28588I$	0
$b = -0.08319 + 1.71273I$		
$u = -1.182510 - 0.025488I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.149815 - 0.792334I$	$4.58752 - 3.28588I$	0
$b = -0.08319 - 1.71273I$		
$u = 0.960690 + 0.700258I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.170467 - 0.529914I$	$1.22350 + 4.74489I$	0
$b = 0.429578 - 1.064780I$		
$u = 0.960690 - 0.700258I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.170467 + 0.529914I$	$1.22350 - 4.74489I$	0
$b = 0.429578 + 1.064780I$		
$u = 1.022220 + 0.626579I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.346636 + 0.523779I$	$1.87463 - 0.78688I$	0
$b = -0.299489 + 1.056400I$		
$u = 1.022220 - 0.626579I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.346636 - 0.523779I$	$1.87463 + 0.78688I$	0
$b = -0.299489 - 1.056400I$		
$u = 1.216360 + 0.116183I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -2.34185 + 0.37415I$	$-1.99576 - 3.02877I$	0
$b = -0.685889 + 0.406589I$		
$u = 1.216360 - 0.116183I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -2.34185 - 0.37415I$	$-1.99576 + 3.02877I$	0
$b = -0.685889 - 0.406589I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.307636 + 0.644850I$		
$a = 1.144270 + 0.031313I$	$6.42634 - 1.17254I$	$-0.566200 + 1.294911I$
$b = 0.165753 - 1.304350I$		
$u = -0.307636 - 0.644850I$		
$a = 1.144270 - 0.031313I$	$6.42634 + 1.17254I$	$-0.566200 - 1.294911I$
$b = 0.165753 + 1.304350I$		
$u = 0.250540 + 0.658416I$		
$a = 0.582040 + 0.468015I$	$0.56981 - 4.60985I$	$-6.69053 + 5.91571I$
$b = 0.960204 - 0.362556I$		
$u = 0.250540 - 0.658416I$		
$a = 0.582040 - 0.468015I$	$0.56981 + 4.60985I$	$-6.69053 - 5.91571I$
$b = 0.960204 + 0.362556I$		
$u = -0.397265 + 0.581288I$		
$a = -1.344430 + 0.129900I$	$6.05175 + 4.76483I$	$-1.11123 - 4.56468I$
$b = -0.284219 + 1.305220I$		
$u = -0.397265 - 0.581288I$		
$a = -1.344430 - 0.129900I$	$6.05175 - 4.76483I$	$-1.11123 + 4.56468I$
$b = -0.284219 - 1.305220I$		
$u = 0.166593 + 0.624695I$		
$a = 0.134377 + 1.238880I$	$1.53389 - 2.11161I$	$-1.83843 + 4.55656I$
$b = -0.262438 - 0.985240I$		
$u = 0.166593 - 0.624695I$		
$a = 0.134377 - 1.238880I$	$1.53389 + 2.11161I$	$-1.83843 - 4.55656I$
$b = -0.262438 + 0.985240I$		
$u = 1.360300 + 0.086702I$		
$a = -1.78259 - 0.56257I$	$-4.90942 - 2.39733I$	0
$b = -0.611650 - 0.809721I$		
$u = 1.360300 - 0.086702I$		
$a = -1.78259 + 0.56257I$	$-4.90942 + 2.39733I$	0
$b = -0.611650 + 0.809721I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.370480 + 0.211215I$		
$a = -1.42173 - 0.57455I$	$-3.80109 + 2.07837I$	0
$b = -1.254690 - 0.485726I$		
$u = -1.370480 - 0.211215I$		
$a = -1.42173 + 0.57455I$	$-3.80109 - 2.07837I$	0
$b = -1.254690 + 0.485726I$		
$u = -1.372610 + 0.240045I$		
$a = -1.206450 + 0.088768I$	$-3.38098 + 5.24726I$	0
$b = -0.536814 + 1.263550I$		
$u = -1.372610 - 0.240045I$		
$a = -1.206450 - 0.088768I$	$-3.38098 - 5.24726I$	0
$b = -0.536814 - 1.263550I$		
$u = -1.401420 + 0.163779I$		
$a = 1.005320 + 0.195931I$	$-6.11056 + 0.33405I$	0
$b = 0.406771 - 1.172380I$		
$u = -1.401420 - 0.163779I$		
$a = 1.005320 - 0.195931I$	$-6.11056 - 0.33405I$	0
$b = 0.406771 + 1.172380I$		
$u = -1.40212 + 0.25943I$		
$a = 1.38067 + 0.69174I$	$-4.71228 + 7.96352I$	0
$b = 1.225810 + 0.584729I$		
$u = -1.40212 - 0.25943I$		
$a = 1.38067 - 0.69174I$	$-4.71228 - 7.96352I$	0
$b = 1.225810 - 0.584729I$		
$u = 0.153691 + 0.545787I$		
$a = -0.556917 - 0.791426I$	$1.086080 + 0.692045I$	$-4.81030 + 0.29508I$
$b = -0.921325 + 0.199362I$		
$u = 0.153691 - 0.545787I$		
$a = -0.556917 + 0.791426I$	$1.086080 - 0.692045I$	$-4.81030 - 0.29508I$
$b = -0.921325 - 0.199362I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.40946 + 0.27587I$		
$a = 1.41078 + 0.77344I$	$0.95728 - 2.24717I$	0
$b = 0.461649 + 1.079170I$		
$u = 1.40946 - 0.27587I$		
$a = 1.41078 - 0.77344I$	$0.95728 + 2.24717I$	0
$b = 0.461649 - 1.079170I$		
$u = -1.45673$		
$a = -1.09429$	-7.21613	0
$b = -0.967879$		
$u = -1.43351 + 0.37170I$		
$a = -1.60294 + 0.24999I$	$-1.23187 + 9.17979I$	0
$b = -0.76178 + 1.26721I$		
$u = -1.43351 - 0.37170I$		
$a = -1.60294 - 0.24999I$	$-1.23187 - 9.17979I$	0
$b = -0.76178 - 1.26721I$		
$u = 1.46184 + 0.24029I$		
$a = -1.51788 - 0.84748I$	$0.04969 - 7.86068I$	0
$b = -0.558703 - 1.096040I$		
$u = 1.46184 - 0.24029I$		
$a = -1.51788 + 0.84748I$	$0.04969 + 7.86068I$	0
$b = -0.558703 + 1.096040I$		
$u = -1.45691 + 0.27854I$		
$a = 1.51683 + 0.01897I$	$-8.38340 + 8.24100I$	0
$b = 0.657430 - 1.153890I$		
$u = -1.45691 - 0.27854I$		
$a = 1.51683 - 0.01897I$	$-8.38340 - 8.24100I$	0
$b = 0.657430 + 1.153890I$		
$u = 0.489956$		
$a = 0.405505$	-0.859418	-11.8180
$b = -0.332522$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.46811 + 0.38180I$		
$a = 1.69029 - 0.23279I$	$-2.5536 + 15.1714I$	0
$b = 0.80501 - 1.23713I$		
$u = -1.46811 - 0.38180I$		
$a = 1.69029 + 0.23279I$	$-2.5536 - 15.1714I$	0
$b = 0.80501 + 1.23713I$		
$u = -1.53424 + 0.14331I$		
$a = 0.949094 + 0.550926I$	$-10.47490 + 2.55878I$	0
$b = 0.848905 + 0.481246I$		
$u = -1.53424 - 0.14331I$		
$a = 0.949094 - 0.550926I$	$-10.47490 - 2.55878I$	0
$b = 0.848905 - 0.481246I$		
$u = 0.320933 + 0.297553I$		
$a = 0.20023 - 3.24402I$	$-0.66653 + 1.65828I$	$-3.28323 + 3.22527I$
$b = 0.180899 + 0.609146I$		
$u = 0.320933 - 0.297553I$		
$a = 0.20023 + 3.24402I$	$-0.66653 - 1.65828I$	$-3.28323 - 3.22527I$
$b = 0.180899 - 0.609146I$		
$u = -1.68096 + 0.03245I$		
$a = 0.170430 + 0.699797I$	$-8.49817 - 2.35434I$	0
$b = 0.154472 + 0.628288I$		
$u = -1.68096 - 0.03245I$		
$a = 0.170430 - 0.699797I$	$-8.49817 + 2.35434I$	0
$b = 0.154472 - 0.628288I$		
$u = -0.1037940 + 0.0707771I$		
$a = -5.31036 + 0.40793I$	$-0.33181 + 1.48905I$	$-3.19515 - 4.46795I$
$b = -0.357301 + 0.551894I$		
$u = -0.1037940 - 0.0707771I$		
$a = -5.31036 - 0.40793I$	$-0.33181 - 1.48905I$	$-3.19515 + 4.46795I$
$b = -0.357301 - 0.551894I$		

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

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

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

$$a_3 = \begin{pmatrix} a \\ a^2 + 2a + 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} a^2 + 3a + 1 \\ a^2 + 2a + 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -a^3 - 2a^2 - a + 1 \\ -a^3 - 2a^2 - a + 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -a^3 - 4a^2 - 5a - 3 \\ -a^3 - 3a^2 - 4a - 2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -a^3 - 2a^2 - a + 1 \\ -a^3 - 2a^2 - a + 1 \end{pmatrix}$$

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

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

(ii) Obstruction class = 1

(iii) Cusp Shapes = $-3a^3 - 12a^2 - 7a - 10$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^4 + y^3 + 3y^2 + 2y + 1$
c_2, c_3, c_5 c_7	$y^4 + 5y^3 + 7y^2 + 2y + 1$
c_6, c_9	y^4
c_8, c_{10}, c_{11}	$(y - 1)^4$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$		
$a = -0.148192 + 0.911292I$	$5.14581 + 3.16396I$	$-0.358581 - 1.047693I$
$b = -0.10488 + 1.55249I$		
$u = 1.00000$		
$a = -0.148192 - 0.911292I$	$5.14581 - 3.16396I$	$-0.358581 + 1.047693I$
$b = -0.10488 - 1.55249I$		
$u = 1.00000$		
$a = -1.35181 + 0.72034I$	$-1.85594 - 1.41510I$	$-15.1414 + 7.6022I$
$b = -0.395123 - 0.506844I$		
$u = 1.00000$		
$a = -1.35181 - 0.72034I$	$-1.85594 + 1.41510I$	$-15.1414 - 7.6022I$
$b = -0.395123 + 0.506844I$		

$$\text{III. } I_3^u = \langle b, a^2 + au + 2a + 3u + 5, u^2 + u - 1 \rangle$$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 1 \\ -u + 1 \end{pmatrix}$$

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

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

$$a_2 = \begin{pmatrix} 2au \\ 3au - 2a \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

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

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

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

(ii) Obstruction class = 1

(iii) Cusp Shapes = $-5au - a - 3u - 19$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.618034$		
$a = -1.30902 + 2.26728I$	$-0.98696 + 2.02988I$	$-15.5000 - 9.2736I$
$b = 0$		
$u = 0.618034$		
$a = -1.30902 - 2.26728I$	$-0.98696 - 2.02988I$	$-15.5000 + 9.2736I$
$b = 0$		
$u = -1.61803$		
$a = -0.190983 + 0.330792I$	$-8.88264 + 2.02988I$	$-15.5000 + 2.3454I$
$b = 0$		
$u = -1.61803$		
$a = -0.190983 - 0.330792I$	$-8.88264 - 2.02988I$	$-15.5000 - 2.3454I$
$b = 0$		

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2 + u + 1)^2)(u^4 - u^3 + u^2 + 1)(u^{60} + 4u^{59} + \dots + 6u + 1)$
c_2, c_5	$((u^2 + u + 1)^2)(u^4 + u^3 + 3u^2 + 2u + 1)(u^{60} + 20u^{59} + \dots - 82u + 1)$
c_3	$u^4(u^4 - u^3 + 3u^2 - 2u + 1)(u^{60} - 2u^{59} + \dots - 16u + 16)$
c_4	$((u^2 - u + 1)^2)(u^4 + u^3 + u^2 + 1)(u^{60} + 4u^{59} + \dots + 6u + 1)$
c_6	$u^4(u^2 + u - 1)^2(u^{60} + 3u^{59} + \dots - 24u - 16)$
c_7	$u^4(u^4 + u^3 + 3u^2 + 2u + 1)(u^{60} - 2u^{59} + \dots - 16u + 16)$
c_8	$((u - 1)^4)(u^2 + u - 1)^2(u^{60} - 7u^{59} + \dots + 6u - 1)$
c_9	$u^4(u^2 - u - 1)^2(u^{60} + 3u^{59} + \dots - 24u - 16)$
c_{10}, c_{11}	$((u + 1)^4)(u^2 - u - 1)^2(u^{60} - 7u^{59} + \dots + 6u - 1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$((y^2 + y + 1)^2)(y^4 + y^3 + 3y^2 + 2y + 1)(y^{60} + 20y^{59} + \dots - 82y + 1)$
c_2, c_5	$((y^2 + y + 1)^2)(y^4 + 5y^3 + \dots + 2y + 1)(y^{60} + 44y^{59} + \dots - 7010y + 1)$
c_3, c_7	$y^4(y^4 + 5y^3 + \dots + 2y + 1)(y^{60} + 30y^{59} + \dots + 1408y + 256)$
c_6, c_9	$y^4(y^2 - 3y + 1)^2(y^{60} - 33y^{59} + \dots - 576y + 256)$
c_8, c_{10}, c_{11}	$((y - 1)^4)(y^2 - 3y + 1)^2(y^{60} - 57y^{59} + \dots - 48y + 1)$