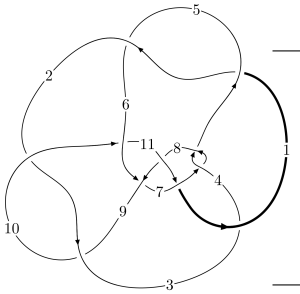
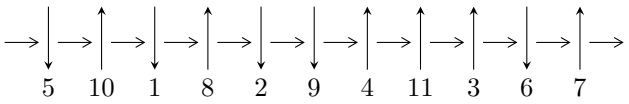
$11a_{300}$ $(K11a_{300})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$$\underset{c_2}{2,10} \to \underset{c_{10}}{3,6} \to \underset{c_5}{11} \to \underset{c_1}{5} \longrightarrow \underset{c_9}{1} \longrightarrow \underset{c_6}{9} \longrightarrow \underset{c_8}{7} \longrightarrow \underset{c_4}{8} \longrightarrow 4 \longrightarrow\!\!\!\!\rightarrow c_3, c_7, c_{11}$$

Ideals for irreducible components[2]of $X_{\mathbf{par}}$

$$\begin{aligned} I_1^u = \langle & 1.10239 \times 10^{271} u^{95} - 1.29227 \times 10^{272} u^{94} + \cdots + 1.23928 \times 10^{271} b + 2.12022 \times 10^{274}, \\ & 1.69259 \times 10^{274} u^{95} - 4.36720 \times 10^{274} u^{94} + \cdots + 2.39182 \times 10^{273} a + 6.71018 \times 10^{276}, \\ & u^{96} + 32u^{94} + \cdots - 1260u - 193 \rangle \\ I_2^u = \langle & -312425u^{19} - 462214u^{18} + \cdots + 208363b - 52657, \\ & 2692148u^{19} + 2660136u^{18} + \cdots + 1041815a + 3674309,\ u^{20} + u^{19} + \cdots + 2u - 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 116 representations.

[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. $\boldsymbol{I_1^u = \langle 1.10 \times 10^{271} u^{95} - 1.29 \times 10^{272} u^{94} + \cdots + 1.24 \times 10^{271} b + 2.12 \times 10^{274},\ 1.69 \times 10^{274} u^{95} - 4.37 \times 10^{274} u^{94} + \cdots + 2.39 \times 10^{273} a + 6.71 \times 10^{276},\ u^{96} + 32 u^{94} + \cdots - 1260 u - 193 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -7.07659u^{95} + 18.2589u^{94} + \cdots - 16539.3u - 2805.47 \\ -0.889541u^{95} + 10.4276u^{94} + \cdots - 10657.3u - 1710.84 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -7.96908u^{95} + 10.7719u^{94} + \cdots - 8088.81u - 1484.13 \\ 0.381477u^{95} + 4.65214u^{94} + \cdots - 5016.46u - 782.330 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -7.96613u^{95} + 28.6864u^{94} + \cdots - 27196.6u - 4516.31 \\ -0.889541u^{95} + 10.4276u^{94} + \cdots - 10657.3u - 1710.84 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -4.42194u^{95} + 1.59863u^{94} + \cdots - 63.9621u - 122.087 \\ -0.368419u^{95} + 1.21715u^{94} + \cdots - 1301.07u - 213.070 \end{pmatrix}$$

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

$$a_7 = \begin{pmatrix} -10.1408u^{95} + 26.9593u^{94} + \cdots - 24457.0u - 4141.68 \\ 0.821675u^{95} + 12.0458u^{94} + \cdots - 13110.7u - 2053.80 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 24.0257u^{95} - 8.64454u^{94} + \cdots - 603.693u + 534.594 \\ 6.39239u^{95} - 8.97364u^{94} + \cdots + 6887.06u + 1253.19 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -23.1189u^{95} + 9.51320u^{94} + \cdots - 721.295u - 719.317 \\ -6.76103u^{95} + 8.21702u^{94} + \cdots - 5918.27u - 1108.98 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -23.1189u^{95} + 9.51320u^{94} + \cdots - 721.295u - 719.317 \\ -6.76103u^{95} + 8.21702u^{94} + \cdots - 5918.27u - 1108.98 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 7.10864u^{95} + 21.6510u^{94} + \cdots - 27025.5u - 4094.60$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{96} - u^{95} + \cdots + 44434u + 5239$
c_2, c_9	$u^{96} + 32u^{94} + \cdots - 1260u - 193$
c_3	$u^{96} - 9u^{95} + \cdots + 371u - 46$
c_4, c_7	$u^{96} + u^{95} + \cdots + 60u - 101$
c_6	$u^{96} - 4u^{95} + \cdots - 45u + 1$
c_8	$u^{96} + 10u^{95} + \cdots + 3240u + 368$
c_{10}	$u^{96} + 2u^{95} + \cdots - 159407u - 226723$
c_{11}	$u^{96} - 6u^{95} + \cdots - 14458u + 1789$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{96} - 73y^{95} + \cdots + 553636226y + 27447121$
c_2, c_9	$y^{96} + 64y^{95} + \cdots + 1764038y + 37249$
c_3	$y^{96} - y^{95} + \cdots + 405435y + 2116$
c_4, c_7	$y^{96} - 53y^{95} + \cdots - 127426y + 10201$
c_6	$y^{96} - 4y^{95} + \cdots - 559y + 1$
c_8	$y^{96} - 10y^{95} + \cdots + 3636544y + 135424$
c_{10}	$y^{96} - 36y^{95} + \cdots - 374201254849y + 51403318729$
c_{11}	$y^{96} - 16y^{95} + \cdots - 110849866y + 3200521$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.477710 + 0.871860I$ $a = -1.58702 + 0.33319I$ $b = 0.579139 + 0.546384I$	$1.89831 + 4.86756I$	0
$u = 0.477710 - 0.871860I$ $a = -1.58702 - 0.33319I$ $b = 0.579139 - 0.546384I$	$1.89831 - 4.86756I$	0
$u = 0.349612 + 0.927401I$ $a = 0.028575 + 0.982383I$ $b = 0.443823 - 0.618828I$	$-0.40537 + 1.96180I$	0
$u = 0.349612 - 0.927401I$ $a = 0.028575 - 0.982383I$ $b = 0.443823 + 0.618828I$	$-0.40537 - 1.96180I$	0
$u = -0.150164 + 1.021670I$ $a = 1.31047 + 0.62522I$ $b = 0.801587 - 0.111152I$	$0.829229 + 0.160481I$	0
$u = -0.150164 - 1.021670I$ $a = 1.31047 - 0.62522I$ $b = 0.801587 + 0.111152I$	$0.829229 - 0.160481I$	0
$u = -0.006380 + 0.958245I$ $a = -0.372426 + 0.041323I$ $b = -2.84025 + 2.76183I$	$-1.83794 + 0.18273I$	0
$u = -0.006380 - 0.958245I$ $a = -0.372426 - 0.041323I$ $b = -2.84025 - 2.76183I$	$-1.83794 - 0.18273I$	0
$u = 1.006110 + 0.273433I$ $a = 0.044883 - 0.674284I$ $b = -0.402873 + 0.524513I$	$5.03978 + 1.15243I$	0
$u = 1.006110 - 0.273433I$ $a = 0.044883 + 0.674284I$ $b = -0.402873 - 0.524513I$	$5.03978 - 1.15243I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.762249 + 0.575493I$ $a = 1.147770 - 0.749601I$ $b = -1.101860 + 0.348699I$	$0.74726 + 5.71599I$	0
$u = 0.762249 - 0.575493I$ $a = 1.147770 + 0.749601I$ $b = -1.101860 - 0.348699I$	$0.74726 - 5.71599I$	0
$u = -0.115793 + 1.054130I$ $a = -1.68582 + 0.13770I$ $b = -1.214340 - 0.076228I$	$-2.85619 - 3.24531I$	0
$u = -0.115793 - 1.054130I$ $a = -1.68582 - 0.13770I$ $b = -1.214340 + 0.076228I$	$-2.85619 + 3.24531I$	0
$u = -0.119486 + 1.065540I$ $a = 2.23374 + 0.04464I$ $b = 1.151510 + 0.250704I$	$-0.00337 - 7.83254I$	0
$u = -0.119486 - 1.065540I$ $a = 2.23374 - 0.04464I$ $b = 1.151510 - 0.250704I$	$-0.00337 + 7.83254I$	0
$u = -0.096656 + 1.073260I$ $a = -0.78866 + 1.19330I$ $b = -1.48118 - 0.18409I$	$-5.22833 - 2.70073I$	0
$u = -0.096656 - 1.073260I$ $a = -0.78866 - 1.19330I$ $b = -1.48118 + 0.18409I$	$-5.22833 + 2.70073I$	0
$u = 0.101676 + 1.075690I$ $a = 0.444887 + 0.616934I$ $b = 0.67291 - 1.62907I$	$-0.605747 - 0.447290I$	0
$u = 0.101676 - 1.075690I$ $a = 0.444887 - 0.616934I$ $b = 0.67291 + 1.62907I$	$-0.605747 + 0.447290I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.083330+1.113740I$ $a=\ 0.141414-1.204450I$ $b=\ 1.263970+0.294772I$	$-5.35019+1.42280I$	0
$u=-0.083330-1.113740I$ $a=\ 0.141414+1.204450I$ $b=\ 1.263970-0.294772I$	$-5.35019-1.42280I$	0
$u=-0.861117+0.059028I$ $a=-1.101960-0.399619I$ $b=\ 1.322520+0.148419I$	$-3.40821-0.60971I$	0
$u=-0.861117-0.059028I$ $a=-1.101960+0.399619I$ $b=\ 1.322520-0.148419I$	$-3.40821+0.60971I$	0
$u=\ 0.463157+0.690308I$ $a=\ 1.207050+0.428007I$ $b=-0.160459-0.467180I$	$0.39402+1.56177I$	0
$u=\ 0.463157-0.690308I$ $a=\ 1.207050-0.428007I$ $b=-0.160459+0.467180I$	$0.39402-1.56177I$	0
$u=\ 0.763821+0.888138I$ $a=-0.929808+0.763951I$ $b=\ 1.044250-0.014042I$	$-0.0489695-0.0733989I$	0
$u=\ 0.763821-0.888138I$ $a=-0.929808-0.763951I$ $b=\ 1.044250+0.014042I$	$-0.0489695+0.0733989I$	0
$u=\ 0.036681+1.172390I$ $a=-0.282225-0.846664I$ $b=\ 0.382233+0.654066I$	$-3.96883+1.64207I$	0
$u=\ 0.036681-1.172390I$ $a=-0.282225+0.846664I$ $b=\ 0.382233-0.654066I$	$-3.96883-1.64207I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.745178+0.342343I$ $a=-0.642571+0.754957I$ $b=-0.686324-0.574204I$	$4.50509-2.67262I$	0
$u=-0.745178-0.342343I$ $a=-0.642571-0.754957I$ $b=-0.686324+0.574204I$	$4.50509+2.67262I$	0
$u=-0.344626+1.155090I$ $a=0.053249+0.640010I$ $b=0.391099-1.075970I$	$1.96286-1.30339I$	0
$u=-0.344626-1.155090I$ $a=0.053249-0.640010I$ $b=0.391099+1.075970I$	$1.96286+1.30339I$	0
$u=-0.780859+0.010223I$ $a=1.36580-0.70315I$ $b=-1.178590+0.396139I$	$-2.44931+4.41382I$	0
$u=-0.780859-0.010223I$ $a=1.36580+0.70315I$ $b=-1.178590-0.396139I$	$-2.44931-4.41382I$	0
$u=-0.735809+0.256765I$ $a=-1.18724+0.94156I$ $b=-0.007951-0.889298I$	$4.54881+7.06507I$	0
$u=-0.735809-0.256765I$ $a=-1.18724-0.94156I$ $b=-0.007951+0.889298I$	$4.54881-7.06507I$	0
$u=-0.410401+1.157480I$ $a=-0.280325+0.925021I$ $b=-0.32162-1.39188I$	$1.76805-11.34400I$	0
$u=-0.410401-1.157480I$ $a=-0.280325-0.925021I$ $b=-0.32162+1.39188I$	$1.76805+11.34400I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.384452+1.169040I$ $a=\ 0.081087-0.951266I$ $b=\ 0.183037+1.035960I$	$-2.07883-6.40543I$	0
$u=-0.384452-1.169040I$ $a=\ 0.081087+0.951266I$ $b=\ 0.183037-1.035960I$	$-2.07883+6.40543I$	0
$u=\ 1.239660+0.026962I$ $a=\ 0.830294+0.423344I$ $b=-1.317880-0.400449I$	$0.39090-11.66790I$	0
$u=\ 1.239660-0.026962I$ $a=\ 0.830294-0.423344I$ $b=-1.317880+0.400449I$	$0.39090+11.66790I$	0
$u=\ 0.207707+0.729044I$ $a=\ 0.11883-1.96148I$ $b=-0.620878+0.770619I$	$2.49221-1.38820I$	0
$u=\ 0.207707-0.729044I$ $a=\ 0.11883+1.96148I$ $b=-0.620878-0.770619I$	$2.49221+1.38820I$	0
$u=\ 0.601578+1.098430I$ $a=-0.101775-0.387401I$ $b=-0.104158+0.634763I$	$2.50058+4.48584I$	0
$u=\ 0.601578-1.098430I$ $a=-0.101775+0.387401I$ $b=-0.104158-0.634763I$	$2.50058-4.48584I$	0
$u=-0.663968+0.300230I$ $a=-0.540867-1.231100I$ $b=\ 1.43619-0.02619I$	$-1.17974-2.82902I$	0
$u=-0.663968-0.300230I$ $a=-0.540867+1.231100I$ $b=\ 1.43619+0.02619I$	$-1.17974+2.82902I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.660203+0.299314I$ $a=\ 1.189050-0.630687I$ $b=\ 0.107003+0.433923I$	$0.67930+2.39127I$	0
$u=-0.660203-0.299314I$ $a=\ 1.189050+0.630687I$ $b=\ 0.107003-0.433923I$	$0.67930-2.39127I$	0
$u=-0.672213+1.105820I$ $a=-0.336516-0.738603I$ $b=\ 1.382600-0.006716I$	$-5.14389+0.01776I$	0
$u=-0.672213-1.105820I$ $a=-0.336516+0.738603I$ $b=\ 1.382600+0.006716I$	$-5.14389-0.01776I$	0
$u=\ 1.329830+0.055464I$ $a=-0.748294-0.249633I$ $b=\ 1.229010+0.240026I$	$-2.77482-5.11934I$	0
$u=\ 1.329830-0.055464I$ $a=-0.748294+0.249633I$ $b=\ 1.229010-0.240026I$	$-2.77482+5.11934I$	0
$u=\ 0.098167+1.330940I$ $a=\ 0.436888+0.783405I$ $b=\ 0.127516-0.181825I$	$-1.31348+5.11994I$	0
$u=\ 0.098167-1.330940I$ $a=\ 0.436888-0.783405I$ $b=\ 0.127516+0.181825I$	$-1.31348-5.11994I$	0
$u=-0.447115+1.261890I$ $a=\ 0.245321-1.357450I$ $b=\ 1.41900+0.67079I$	$-6.22408-8.95276I$	0
$u=-0.447115-1.261890I$ $a=\ 0.245321+1.357450I$ $b=\ 1.41900-0.67079I$	$-6.22408+8.95276I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.362340+1.308560I$ $a=\ \ 0.32191-1.48442I$ $b=\ \ 1.122860+0.174890I$	$-5.75032-4.28762I$	0
$u=-0.362340-1.308560I$ $a=\ \ 0.32191+1.48442I$ $b=\ \ 1.122860-0.174890I$	$-5.75032+4.28762I$	0
$u=-0.130104+0.628668I$ $a=\ \ 1.30314-1.51349I$ $b=-0.989484+0.601204I$	$1.29886+6.55523I$	0
$u=-0.130104-0.628668I$ $a=\ \ 1.30314+1.51349I$ $b=-0.989484-0.601204I$	$1.29886-6.55523I$	0
$u=-0.472576+1.291860I$ $a=-0.176604+1.278790I$ $b=-1.52018-0.38581I$	$-7.44389-5.44199I$	0
$u=-0.472576-1.291860I$ $a=-0.176604-1.278790I$ $b=-1.52018+0.38581I$	$-7.44389+5.44199I$	0
$u=\ \ 0.243938+1.372430I$ $a=\ \ 0.239432+0.742561I$ $b=\ \ 1.56261-0.62158I$	$-5.25019+8.77138I$	0
$u=\ \ 0.243938-1.372430I$ $a=\ \ 0.239432-0.742561I$ $b=\ \ 1.56261+0.62158I$	$-5.25019-8.77138I$	0
$u=-0.58908+1.30122I$ $a=-0.019208+0.946271I$ $b=-1.46087-0.15906I$	$-6.72567-4.75540I$	0
$u=-0.58908-1.30122I$ $a=-0.019208-0.946271I$ $b=-1.46087+0.15906I$	$-6.72567+4.75540I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.39153+1.37600I$ $a=-0.519956+1.309210I$ $b=-1.382550-0.176450I$	$-6.28639-6.86236I$	0
$u=-0.39153-1.37600I$ $a=-0.519956-1.309210I$ $b=-1.382550+0.176450I$	$-6.28639+6.86236I$	0
$u=-0.522378+0.207279I$ $a=\ \ 0.94119+1.52739I$ $b=-1.127540+0.337105I$	$-1.28698-0.73115I$	$4.34059+0.I$
$u=-0.522378-0.207279I$ $a=\ \ 0.94119-1.52739I$ $b=-1.127540-0.337105I$	$-1.28698+0.73115I$	$4.34059+0.I$
$u=-0.237413+0.497598I$ $a=-0.572508+1.064460I$ $b=\ \ 0.898613-0.409005I$	$-1.43609+1.70978I$	$-3.75375+0.93348I$
$u=-0.237413-0.497598I$ $a=-0.572508-1.064460I$ $b=\ \ 0.898613+0.409005I$	$-1.43609-1.70978I$	$-3.75375-0.93348I$
$u=\ \ 0.272964+0.408032I$ $a=\ \ 1.06742+1.26038I$ $b=\ \ 0.074964-0.469777I$	$0.406346+1.198920I$	$3.01437-6.03071I$
$u=\ \ 0.272964-0.408032I$ $a=\ \ 1.06742-1.26038I$ $b=\ \ 0.074964+0.469777I$	$0.406346-1.198920I$	$3.01437+6.03071I$
$u=\ \ 0.57869+1.39729I$ $a=\ \ 0.179334+1.178360I$ $b=\ \ 1.52584-0.54511I$	$-3.9614+17.9979I$	0
$u=\ \ 0.57869-1.39729I$ $a=\ \ 0.179334-1.178360I$ $b=\ \ 1.52584+0.54511I$	$-3.9614-17.9979I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.13051 + 1.52776I$ $a = -0.213567 - 0.620488I$ $b = -1.249880 + 0.498140I$	$-8.49441 + 1.95871I$	0
$u = 0.13051 - 1.52776I$ $a = -0.213567 + 0.620488I$ $b = -1.249880 - 0.498140I$	$-8.49441 - 1.95871I$	0
$u = 0.59416 + 1.41894I$ $a = -0.102988 - 1.085290I$ $b = -1.43066 + 0.45897I$	$-7.19197 + 11.75550I$	0
$u = 0.59416 - 1.41894I$ $a = -0.102988 + 1.085290I$ $b = -1.43066 - 0.45897I$	$-7.19197 - 11.75550I$	0
$u = 0.51898 + 1.47406I$ $a = 0.207200 + 0.855829I$ $b = 1.151320 - 0.483971I$	$-0.64154 + 6.80371I$	0
$u = 0.51898 - 1.47406I$ $a = 0.207200 - 0.855829I$ $b = 1.151320 + 0.483971I$	$-0.64154 - 6.80371I$	0
$u = 1.58555$ $a = 0.409866$ $b = -0.948820$	4.87233	0
$u = -0.55623 + 1.52426I$ $a = 0.407315 - 0.689064I$ $b = 1.364050 + 0.276302I$	$-2.24244 - 7.86585I$	0
$u = -0.55623 - 1.52426I$ $a = 0.407315 + 0.689064I$ $b = 1.364050 - 0.276302I$	$-2.24244 + 7.86585I$	0
$u = 0.44153 + 1.59135I$ $a = 0.069803 + 0.567365I$ $b = 1.254110 + 0.048386I$	$-4.94765 - 5.11148I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.44153 - 1.59135I$ $a = \quad 0.069803 - 0.567365I$ $b = \quad 1.254110 - 0.048386I$	$-4.94765 + 5.11148I$	0
$u = \quad 0.37156 + 1.61313I$ $a = -0.122666 - 0.625527I$ $b = -1.224190 + 0.197566I$	$-8.68039 + 1.55353I$	0
$u = \quad 0.37156 - 1.61313I$ $a = -0.122666 + 0.625527I$ $b = -1.224190 - 0.197566I$	$-8.68039 - 1.55353I$	0
$u = \quad 0.075199 + 0.246020I$ $a = \quad 0.41097 - 3.47500I$ $b = -0.499475 + 0.742524I$	$2.56439 - 1.51823I$	$3.61769 + 1.58173I$
$u = \quad 0.075199 - 0.246020I$ $a = \quad 0.41097 + 3.47500I$ $b = -0.499475 - 0.742524I$	$2.56439 + 1.51823I$	$3.61769 - 1.58173I$
$u = -1.83778$ $a = \quad 0.265734$ $b = -1.18833$	3.59541	0

II.

$\boldsymbol{I_2^u = \langle -3.12\times 10^5 u^{19} - 4.62\times 10^5 u^{18} + \cdots + 2.08\times 10^5 b - 5.27\times 10^4,\ 2.69\times 10^6 u^{19} + 2.66\times 10^6 u^{18} + \cdots + 1.04\times 10^6 a + 3.67\times 10^6,\ u^{20} + u^{19} + \cdots + 2u - 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -2.58409u^{19} - 2.55337u^{18} + \cdots + 6.67727u - 3.52683 \\ 1.49943u^{19} + 2.21831u^{18} + \cdots - 3.14436u + 0.252718 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 2.32765u^{19} + 0.794396u^{18} + \cdots - 13.9361u + 6.04702 \\ -1.19565u^{19} - 0.672767u^{18} + \cdots + 7.01248u - 1.30306 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -1.08467u^{19} - 0.335056u^{18} + \cdots + 3.53291u - 3.27412 \\ 1.49943u^{19} + 2.21831u^{18} + \cdots - 3.14436u + 0.252718 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1.30306u^{19} - 3.49871u^{18} + \cdots + 1.38230u + 4.40635 \\ -u^{18} - u^{17} + \cdots + 5u^2 - u \end{pmatrix}$$

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

$$a_7 = \begin{pmatrix} -2.54387u^{19} - 2.17673u^{18} + \cdots + 8.99069u - 4.55130 \\ 1.65294u^{19} + 2.54102u^{18} + \cdots - 4.82518u + 0.940775 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.213805u^{19} + 2.29666u^{18} + \cdots + 8.24658u - 8.45007 \\ 0.532088u^{19} + 0.0208569u^{18} + \cdots - 6.86136u + 3.15695 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.22126u^{19} + 3.91699u^{18} + \cdots + 4.94066u - 7.11246 \\ 0.912188u^{19} + 0.525510u^{18} + \cdots - 6.39415u + 2.53325 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.22126u^{19} + 3.91699u^{18} + \cdots + 4.94066u - 7.11246 \\ 0.912188u^{19} + 0.525510u^{18} + \cdots - 6.39415u + 2.53325 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{1012942}{208363}u^{19} - \frac{1169627}{208363}u^{18} + \cdots - \frac{402660}{208363}u + \frac{907180}{208363}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20} - 2u^{19} + \cdots - 2u + 1$
c_2	$u^{20} + u^{19} + \cdots + 2u - 1$
c_3	$u^{20} + 2u^{19} + \cdots - 6u - 1$
c_4	$u^{20} - 2u^{19} + \cdots + 4u - 1$
c_5	$u^{20} + 2u^{19} + \cdots + 2u + 1$
c_6	$u^{20} - 7u^{19} + \cdots + 5u + 1$
c_7	$u^{20} + 2u^{19} + \cdots - 4u - 1$
c_8	$u^{20} + 3u^{19} + \cdots + u + 1$
c_9	$u^{20} - u^{19} + \cdots - 2u - 1$
c_{10}	$u^{20} - u^{19} + \cdots - 3u - 1$
c_{11}	$u^{20} - 3u^{19} + \cdots + 6u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{20} - 14y^{19} + \cdots + 40y^2 + 1$
c_2, c_9	$y^{20} + 11y^{19} + \cdots + 8y + 1$
c_3	$y^{20} - 10y^{19} + \cdots - 2y + 1$
c_4, c_7	$y^{20} - 10y^{19} + \cdots - 8y + 1$
c_6	$y^{20} - 5y^{19} + \cdots - 9y + 1$
c_8	$y^{20} - 19y^{19} + \cdots - 15y + 1$
c_{10}	$y^{20} - y^{19} + \cdots - 19y + 1$
c_{11}	$y^{20} + 3y^{19} + \cdots - 24y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.403364 + 0.887964I$ $a = 0.935501 - 0.713016I$ $b = -0.072382 + 0.458417I$	$2.09458 - 0.02571I$	$6.51387 - 0.81904I$
$u = 0.403364 - 0.887964I$ $a = 0.935501 + 0.713016I$ $b = -0.072382 - 0.458417I$	$2.09458 + 0.02571I$	$6.51387 + 0.81904I$
$u = 0.013365 + 0.943643I$ $a = 0.539715 - 0.013239I$ $b = 1.89857 - 2.14435I$	$-1.90449 + 0.21781I$	$-29.5538 - 14.4681I$
$u = 0.013365 - 0.943643I$ $a = 0.539715 + 0.013239I$ $b = 1.89857 + 2.14435I$	$-1.90449 - 0.21781I$	$-29.5538 + 14.4681I$
$u = 0.518349 + 0.936741I$ $a = -0.751140 + 0.577664I$ $b = 0.235460 + 0.265262I$	$1.69553 + 3.69576I$	$1.77162 - 1.96947I$
$u = 0.518349 - 0.936741I$ $a = -0.751140 - 0.577664I$ $b = 0.235460 - 0.265262I$	$1.69553 - 3.69576I$	$1.77162 + 1.96947I$
$u = -0.691262 + 0.038386I$ $a = -1.36790 + 0.79675I$ $b = 1.211840 - 0.003779I$	$-2.35457 + 2.06275I$	$-0.52131 - 2.65726I$
$u = -0.691262 - 0.038386I$ $a = -1.36790 - 0.79675I$ $b = 1.211840 + 0.003779I$	$-2.35457 - 2.06275I$	$-0.52131 + 2.65726I$
$u = 1.35310$ $a = 0.156519$ $b = -0.722511$	5.30775	14.8430
$u = -0.410763 + 1.297760I$ $a = -0.39076 + 1.44213I$ $b = -1.384520 - 0.285041I$	$-6.31669 - 6.08976I$	$-1.60733 + 2.73564I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.410763-1.297760I$ $a=-0.39076-1.44213I$ $b=-1.384520+0.285041I$	$-6.31669+6.08976I$	$-1.60733-2.73564I$
$u=\ \ 0.167583+0.600695I$ $a=\ \ 2.63765+0.00921I$ $b=-0.848117+0.445501I$	$1.55717+7.34738I$	$4.09988-9.89194I$
$u=\ \ 0.167583-0.600695I$ $a=\ \ 2.63765-0.00921I$ $b=-0.848117-0.445501I$	$1.55717-7.34738I$	$4.09988+9.89194I$
$u=-0.34366+1.48085I$ $a=\ \ 0.545779-0.694608I$ $b=\ \ 1.280250+0.346035I$	$-3.05795-7.46965I$	$-3.02238+6.16209I$
$u=-0.34366-1.48085I$ $a=\ \ 0.545779+0.694608I$ $b=\ \ 1.280250-0.346035I$	$-3.05795+7.46965I$	$-3.02238-6.16209I$
$u=\ \ 0.287244+0.337360I$ $a=-1.69238-1.44624I$ $b=\ \ 0.822446-0.168895I$	$-1.03432+2.65731I$	$-0.50510-5.09226I$
$u=\ \ 0.287244-0.337360I$ $a=-1.69238+1.44624I$ $b=\ \ 0.822446+0.168895I$	$-1.03432-2.65731I$	$-0.50510+5.09226I$
$u=-0.19147+1.60515I$ $a=-0.190530+0.582994I$ $b=-1.187050-0.396760I$	$-8.22954-1.82787I$	$11.49994+0.55574I$
$u=-0.19147-1.60515I$ $a=-0.190530-0.582994I$ $b=-1.187050+0.396760I$	$-8.22954+1.82787I$	$11.49994-0.55574I$
$u=-1.85860$ $a=\ \ 0.311618$ $b=-1.19048$	3.47385	-31.1940

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20}-2u^{19}+\cdots-2u+1)(u^{96}-u^{95}+\cdots+44434u+5239)$
c_2	$(u^{20}+u^{19}+\cdots+2u-1)(u^{96}+32u^{94}+\cdots-1260u-193)$
c_3	$(u^{20}+2u^{19}+\cdots-6u-1)(u^{96}-9u^{95}+\cdots+371u-46)$
c_4	$(u^{20}-2u^{19}+\cdots+4u-1)(u^{96}+u^{95}+\cdots+60u-101)$
c_5	$(u^{20}+2u^{19}+\cdots+2u+1)(u^{96}-u^{95}+\cdots+44434u+5239)$
c_6	$(u^{20}-7u^{19}+\cdots+5u+1)(u^{96}-4u^{95}+\cdots-45u+1)$
c_7	$(u^{20}+2u^{19}+\cdots-4u-1)(u^{96}+u^{95}+\cdots+60u-101)$
c_8	$(u^{20}+3u^{19}+\cdots+u+1)(u^{96}+10u^{95}+\cdots+3240u+368)$
c_9	$(u^{20}-u^{19}+\cdots-2u-1)(u^{96}+32u^{94}+\cdots-1260u-193)$
c_{10}	$(u^{20}-u^{19}+\cdots-3u-1)(u^{96}+2u^{95}+\cdots-159407u-226723)$
c_{11}	$(u^{20}-3u^{19}+\cdots+6u+1)(u^{96}-6u^{95}+\cdots-14458u+1789)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{20} - 14y^{19} + \cdots + 40y^2 + 1)$ $\cdot (y^{96} - 73y^{95} + \cdots + 553636226y + 27447121)$
c_2, c_9	$(y^{20} + 11y^{19} + \cdots + 8y + 1)(y^{96} + 64y^{95} + \cdots + 1764038y + 37249)$
c_3	$(y^{20} - 10y^{19} + \cdots - 2y + 1)(y^{96} - y^{95} + \cdots + 405435y + 2116)$
c_4, c_7	$(y^{20} - 10y^{19} + \cdots - 8y + 1)(y^{96} - 53y^{95} + \cdots - 127426y + 10201)$
c_6	$(y^{20} - 5y^{19} + \cdots - 9y + 1)(y^{96} - 4y^{95} + \cdots - 559y + 1)$
c_8	$(y^{20} - 19y^{19} + \cdots - 15y + 1)$ $\cdot (y^{96} - 10y^{95} + \cdots + 3636544y + 135424)$
c_{10}	$(y^{20} - y^{19} + \cdots - 19y + 1)$ $\cdot (y^{96} - 36y^{95} + \cdots - 374201254849y + 51403318729)$
c_{11}	$(y^{20} + 3y^{19} + \cdots - 24y + 1)$ $\cdot (y^{96} - 16y^{95} + \cdots - 110849866y + 3200521)$