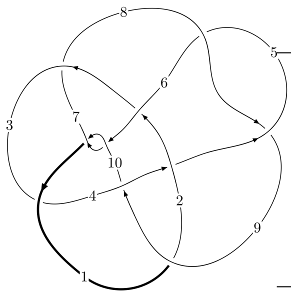
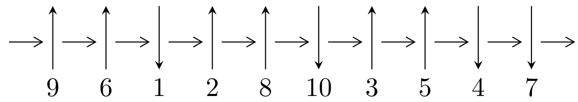
10_{119} ($K10a_{85}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 3.28777 \times 10^{89} u^{59} - 1.22268 \times 10^{90} u^{58} + \cdots + 1.16518 \times 10^{90} b - 4.76698 \times 10^{90},$$
$$4.99619 \times 10^{90} u^{59} - 1.95056 \times 10^{91} u^{58} + \cdots + 1.16518 \times 10^{90} a - 4.95274 \times 10^{91},\ u^{60} - 4u^{59} + \cdots - 23u +$$
$$I_2^u = \langle -u^9 - 4u^7 - 2u^6 - 7u^5 - 5u^4 - 7u^3 - 5u^2 + b - 4u - 2,\ u^7 - u^6 + 3u^5 - 2u^4 + 2u^3 - 3u^2 + a - u - 2,$$
$$u^{10} + u^9 + 5u^8 + 6u^7 + 12u^6 + 13u^5 + 15u^4 + 12u^3 + 9u^2 + 4u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 70 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. $I_1^u =$ $\langle 3.29\times10^{89}u^{59}-1.22\times10^{90}u^{58}+\cdots+1.17\times10^{90}b-4.77\times10^{90},\ 5.00\times10^{90}u^{59}-1.95\times10^{91}u^{58}+\cdots+1.17\times10^{90}a-4.95\times10^{91},\ u^{60}-4u^{59}+\cdots-23u+1\rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-4.28792u^{59}+16.7404u^{58}+\cdots-632.741u+42.5063\\-0.282169u^{59}+1.04935u^{58}+\cdots-68.4354u+4.09120\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-4.49942u^{59}+17.6872u^{58}+\cdots-706.347u+47.0087\\0.0395616u^{59}-0.121304u^{58}+\cdots-70.9634u+4.19192\end{pmatrix}$$
$$a_9 = \begin{pmatrix}u\\u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-3.94168u^{59}+15.4635u^{58}+\cdots-636.369u+42.8382\\0.0640690u^{59}-0.227607u^{58}+\cdots-72.0633u+4.42310\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-1.42367u^{59}+5.54425u^{58}+\cdots-88.6243u-5.93639\\0.806409u^{59}-2.71615u^{58}+\cdots+23.9853u-2.83163\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-3.87666u^{59}+15.1780u^{58}+\cdots-470.845u+20.7208\\-0.0321931u^{59}+0.119215u^{58}+\cdots-17.1665u-0.190875\end{pmatrix}$$
$$a_7 = \begin{pmatrix}5.78866u^{59}-22.0859u^{58}+\cdots+760.341u-39.0347\\0.216555u^{59}-0.514676u^{58}+\cdots+42.0890u-1.34596\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.42721u^{59}-4.42637u^{58}+\cdots+298.469u-20.6166$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{60} + 6u^{59} + \cdots + 543u + 79$
c_2	$u^{60} + u^{59} + \cdots + 314u + 71$
c_3	$u^{60} + 4u^{59} + \cdots - 90u + 31$
c_4	$u^{60} + 4u^{58} + \cdots + 28u + 3$
c_5, c_8	$u^{60} + 4u^{59} + \cdots + 23u + 1$
c_6, c_{10}	$u^{60} + 2u^{59} + \cdots + 21u + 13$
c_7	$u^{60} + u^{59} + \cdots + 1880u + 667$
c_9	$u^{60} + u^{59} + \cdots - 22u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{60} + 14y^{59} + \cdots + 122113y + 6241$
c_2	$y^{60} + 13y^{59} + \cdots + 80466y + 5041$
c_3	$y^{60} - 16y^{59} + \cdots - 65698y + 961$
c_4	$y^{60} + 8y^{59} + \cdots + 152y + 9$
c_5, c_8	$y^{60} + 46y^{59} + \cdots - 77y + 1$
c_6, c_{10}	$y^{60} - 36y^{59} + \cdots - 2183y + 169$
c_7	$y^{60} + 21y^{59} + \cdots + 11382388y + 444889$
c_9	$y^{60} + 5y^{59} + \cdots - 22y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.623835 + 0.811166I$ $a = 0.859875 + 0.355902I$ $b = -0.636544 + 0.230444I$	$0.77022 - 2.47923I$	$0. - 8.23551I$
$u = -0.623835 - 0.811166I$ $a = 0.859875 - 0.355902I$ $b = -0.636544 - 0.230444I$	$0.77022 + 2.47923I$	$0. + 8.23551I$
$u = -0.390191 + 0.895254I$ $a = 0.454903 + 1.198220I$ $b = -0.222891 + 0.173390I$	$0.48057 - 1.96275I$	$6.28895 + 2.92214I$
$u = -0.390191 - 0.895254I$ $a = 0.454903 - 1.198220I$ $b = -0.222891 - 0.173390I$	$0.48057 + 1.96275I$	$6.28895 - 2.92214I$
$u = -0.057890 + 0.957459I$ $a = 0.90207 - 1.34370I$ $b = 0.307590 - 0.697419I$	$-1.69174 - 2.07365I$	$-0.35018 + 3.75765I$
$u = -0.057890 - 0.957459I$ $a = 0.90207 + 1.34370I$ $b = 0.307590 + 0.697419I$	$-1.69174 + 2.07365I$	$-0.35018 - 3.75765I$
$u = 0.055199 + 1.062610I$ $a = -0.240418 + 0.784604I$ $b = 1.238390 + 0.475118I$	$-1.53778 + 2.56920I$	0
$u = 0.055199 - 1.062610I$ $a = -0.240418 - 0.784604I$ $b = 1.238390 - 0.475118I$	$-1.53778 - 2.56920I$	0
$u = 1.098360 + 0.127961I$ $a = 0.283818 - 0.122637I$ $b = -0.223247 - 0.733150I$	$-4.15031 - 0.75171I$	0
$u = 1.098360 - 0.127961I$ $a = 0.283818 + 0.122637I$ $b = -0.223247 + 0.733150I$	$-4.15031 + 0.75171I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.252033 + 1.079010I$ $a = 0.09965 + 1.68364I$ $b = 1.16552 + 1.29014I$	$-1.42019 + 3.81670I$	0
$u = 0.252033 - 1.079010I$ $a = 0.09965 - 1.68364I$ $b = 1.16552 - 1.29014I$	$-1.42019 - 3.81670I$	0
$u = -0.790615 + 0.388915I$ $a = 0.890087 - 0.241883I$ $b = 0.796474 + 0.786684I$	$-0.44456 + 2.32036I$	$-1.97518 - 4.64341I$
$u = -0.790615 - 0.388915I$ $a = 0.890087 + 0.241883I$ $b = 0.796474 - 0.786684I$	$-0.44456 - 2.32036I$	$-1.97518 + 4.64341I$
$u = 0.303509 + 1.104720I$ $a = -0.22498 - 2.03796I$ $b = -0.308920 - 0.321579I$	$-4.17954 + 7.17743I$	0
$u = 0.303509 - 1.104720I$ $a = -0.22498 + 2.03796I$ $b = -0.308920 + 0.321579I$	$-4.17954 - 7.17743I$	0
$u = 1.140370 + 0.172582I$ $a = -0.0216976 - 0.0536118I$ $b = -0.860595 - 0.757350I$	$-1.92721 + 10.19580I$	0
$u = 1.140370 - 0.172582I$ $a = -0.0216976 + 0.0536118I$ $b = -0.860595 + 0.757350I$	$-1.92721 - 10.19580I$	0
$u = -0.423700 + 1.097000I$ $a = 0.01484 - 1.74876I$ $b = 0.98126 - 1.54901I$	$-2.67312 - 6.89147I$	0
$u = -0.423700 - 1.097000I$ $a = 0.01484 + 1.74876I$ $b = 0.98126 + 1.54901I$	$-2.67312 + 6.89147I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.173550 + 0.196304I$ $a = 0.1089490 + 0.0035265I$ $b = -0.723525 + 0.554514I$	$1.66896 - 4.09599I$	0
$u = -1.173550 - 0.196304I$ $a = 0.1089490 - 0.0035265I$ $b = -0.723525 - 0.554514I$	$1.66896 + 4.09599I$	0
$u = 0.105236 + 1.199410I$ $a = -0.79780 + 1.85890I$ $b = -1.31875 + 1.79980I$	$-6.90749 + 6.01393I$	0
$u = 0.105236 - 1.199410I$ $a = -0.79780 - 1.85890I$ $b = -1.31875 - 1.79980I$	$-6.90749 - 6.01393I$	0
$u = -0.057124 + 1.206740I$ $a = -0.225137 - 1.384350I$ $b = -0.83604 - 1.24262I$	$-3.96912 - 1.82451I$	0
$u = -0.057124 - 1.206740I$ $a = -0.225137 + 1.384350I$ $b = -0.83604 + 1.24262I$	$-3.96912 + 1.82451I$	0
$u = -0.057398 + 1.224090I$ $a = -0.66515 - 1.99713I$ $b = 0.539561 - 0.979683I$	$-7.31597 - 5.19158I$	0
$u = -0.057398 - 1.224090I$ $a = -0.66515 + 1.99713I$ $b = 0.539561 + 0.979683I$	$-7.31597 + 5.19158I$	0
$u = 0.539940 + 0.503116I$ $a = 1.024080 + 0.843151I$ $b = 0.880526 - 0.425648I$	$0.285692 - 0.756946I$	$1.15945 - 1.79896I$
$u = 0.539940 - 0.503116I$ $a = 1.024080 - 0.843151I$ $b = 0.880526 + 0.425648I$	$0.285692 + 0.756946I$	$1.15945 + 1.79896I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.696757 + 0.013245I$ $a = 0.218959 - 0.031077I$ $b = 0.950374 + 0.230216I$	$1.77833 + 0.12398I$	$7.12326 + 1.43443I$
$u = -0.696757 - 0.013245I$ $a = 0.218959 + 0.031077I$ $b = 0.950374 - 0.230216I$	$1.77833 - 0.12398I$	$7.12326 - 1.43443I$
$u = 0.262291 + 1.287330I$ $a = 0.29769 + 2.09008I$ $b = 0.97062 + 1.39698I$	$-3.13949 + 6.16052I$	0
$u = 0.262291 - 1.287330I$ $a = 0.29769 - 2.09008I$ $b = 0.97062 - 1.39698I$	$-3.13949 - 6.16052I$	0
$u = 0.097078 + 1.316500I$ $a = -0.859018 + 0.495607I$ $b = -1.55967 + 0.51228I$	$-6.87032 - 1.61985I$	0
$u = 0.097078 - 1.316500I$ $a = -0.859018 - 0.495607I$ $b = -1.55967 - 0.51228I$	$-6.87032 + 1.61985I$	0
$u = -0.313462 + 1.288310I$ $a = 0.49264 - 1.63832I$ $b = 1.01214 - 1.22490I$	$-2.23892 - 3.83057I$	0
$u = -0.313462 - 1.288310I$ $a = 0.49264 + 1.63832I$ $b = 1.01214 + 1.22490I$	$-2.23892 + 3.83057I$	0
$u = 0.588701 + 0.273361I$ $a = 1.06281 + 0.93632I$ $b = -0.866958 + 0.207225I$	$-1.77283 - 3.70444I$	$2.15456 + 4.83060I$
$u = 0.588701 - 0.273361I$ $a = 1.06281 - 0.93632I$ $b = -0.866958 - 0.207225I$	$-1.77283 + 3.70444I$	$2.15456 - 4.83060I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.073825 + 1.367230I$ $a = 0.802201 + 0.446279I$ $b = -0.161175 + 0.349105I$	$-6.64861 - 0.13946I$	0
$u = -0.073825 - 1.367230I$ $a = 0.802201 - 0.446279I$ $b = -0.161175 - 0.349105I$	$-6.64861 + 0.13946I$	0
$u = 0.540634 + 0.052002I$ $a = -0.358037 + 0.018404I$ $b = 0.990107 + 0.775650I$	$1.01358 + 3.09322I$	$5.20661 - 7.95930I$
$u = 0.540634 - 0.052002I$ $a = -0.358037 - 0.018404I$ $b = 0.990107 - 0.775650I$	$1.01358 - 3.09322I$	$5.20661 + 7.95930I$
$u = 0.48204 + 1.37578I$ $a = 0.289297 - 1.243460I$ $b = -0.783244 - 0.988185I$	$-8.85403 + 4.69065I$	0
$u = 0.48204 - 1.37578I$ $a = 0.289297 + 1.243460I$ $b = -0.783244 + 0.988185I$	$-8.85403 - 4.69065I$	0
$u = 0.56774 + 1.38515I$ $a = -0.309520 + 1.074330I$ $b = 0.299852 + 1.192800I$	$-8.17971 + 6.88009I$	0
$u = 0.56774 - 1.38515I$ $a = -0.309520 - 1.074330I$ $b = 0.299852 - 1.192800I$	$-8.17971 - 6.88009I$	0
$u = -0.50546 + 1.41839I$ $a = -0.069865 + 1.320870I$ $b = -1.10129 + 1.06163I$	$-3.32542 - 9.91193I$	0
$u = -0.50546 - 1.41839I$ $a = -0.069865 - 1.320870I$ $b = -1.10129 - 1.06163I$	$-3.32542 + 9.91193I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.49893 + 1.42456I$ $a = -0.12004 - 1.52962I$ $b = -1.14876 - 1.24339I$	$-6.9242 + 15.9387I$	0
$u = 0.49893 - 1.42456I$ $a = -0.12004 + 1.52962I$ $b = -1.14876 + 1.24339I$	$-6.9242 - 15.9387I$	0
$u = -0.39076 + 1.51085I$ $a = 0.232798 - 0.759750I$ $b = 0.621503 - 0.751780I$	$-3.26872 - 3.24397I$	0
$u = -0.39076 - 1.51085I$ $a = 0.232798 + 0.759750I$ $b = 0.621503 + 0.751780I$	$-3.26872 + 3.24397I$	0
$u = 0.105930 + 0.285642I$ $a = 1.73848 + 2.14934I$ $b = 0.223189 - 0.473560I$	$0.08914 - 1.52136I$	$0.92288 + 3.10853I$
$u = 0.105930 - 0.285642I$ $a = 1.73848 - 2.14934I$ $b = 0.223189 + 0.473560I$	$0.08914 + 1.52136I$	$0.92288 - 3.10853I$
$u = 0.81740 + 1.64815I$ $a = -0.236080 + 0.190955I$ $b = -0.000901 + 0.445406I$	$-5.53864 - 3.01539I$	0
$u = 0.81740 - 1.64815I$ $a = -0.236080 - 0.190955I$ $b = -0.000901 - 0.445406I$	$-5.53864 + 3.01539I$	0
$u = 0.0991795 + 0.0504499I$ $a = 2.85459 - 9.86759I$ $b = -0.224592 - 1.103140I$	$-3.57991 - 4.96662I$	$-0.78194 + 5.62106I$
$u = 0.0991795 - 0.0504499I$ $a = 2.85459 + 9.86759I$ $b = -0.224592 + 1.103140I$	$-3.57991 + 4.96662I$	$-0.78194 - 5.62106I$

II. $\boldsymbol{I_2^u = \langle -u^9 - 4u^7 + \cdots + b - 2,\ u^7 - u^6 + 3u^5 - 2u^4 + 2u^3 - 3u^2 + a - u - 2,\ u^{10} + u^9 + \cdots + 4u + 1 \rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^7 + u^6 - 3u^5 + 2u^4 - 2u^3 + 3u^2 + u + 2 \\ u^9 + 4u^7 + 2u^6 + 7u^5 + 5u^4 + 7u^3 + 5u^2 + 4u + 2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^8 + 5u^6 + 2u^5 + 10u^4 + 6u^3 + 10u^2 + 5u + 4 \\ u^9 + u^8 + 5u^7 + 6u^6 + 12u^5 + 13u^4 + 15u^3 + 12u^2 + 8u + 3 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^9 - 5u^7 - u^6 - 10u^5 - 3u^4 - 8u^3 - 2u^2 - 2u + 1 \\ u^3 + u + 1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^9 + 2u^8 + 5u^7 + 11u^6 + 14u^5 + 22u^4 + 20u^3 + 20u^2 + 11u + 6 \\ 2u^9 + u^8 + 9u^7 + 8u^6 + 19u^5 + 17u^4 + 21u^3 + 15u^2 + 10u + 3 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -3u^9 - u^8 - 15u^7 - 9u^6 - 32u^5 - 22u^4 - 33u^3 - 19u^2 - 15u - 2 \\ u^9 + u^8 + 4u^7 + 6u^6 + 8u^5 + 11u^4 + 9u^3 + 8u^2 + 5u + 3 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -3u^9 - u^8 - 13u^7 - 8u^6 - 25u^5 - 16u^4 - 23u^3 - 11u^2 - 10u - 1 \\ u^8 + u^7 + 5u^6 + 5u^5 + 11u^4 + 9u^3 + 10u^2 + 6u + 3 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -10u^9 + 3u^8 - 39u^7 - 3u^6 - 57u^5 - 14u^4 - 31u^3 - 8u^2 - 7u + 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{10} - u^9 + u^8 + 3u^7 + 4u^4 + 2u^2 + 1$
c_2	$u^{10} + 2u^8 + 4u^7 + 2u^6 + 3u^5 + 6u^4 + 4u^3 + u^2 + u + 1$
c_3	$u^{10} + 5u^9 + \cdots + 5u + 1$
c_4	$u^{10} - 5u^9 + 14u^8 - 24u^7 + 29u^6 - 24u^5 + 11u^4 + u^3 - 2u^2 - u + 1$
c_5	$u^{10} + u^9 + 5u^8 + 6u^7 + 12u^6 + 13u^5 + 15u^4 + 12u^3 + 9u^2 + 4u + 1$
c_6	$u^{10} - u^9 - 2u^8 + 4u^7 - 5u^5 + 5u^4 + 2u^3 - 4u^2 + 1$
c_7	$u^{10} + 3u^7 + 2u^6 + 2u^5 + 2u^4 + 3u^3 + 4u^2 + u + 1$
c_8	$u^{10} - u^9 + 5u^8 - 6u^7 + 12u^6 - 13u^5 + 15u^4 - 12u^3 + 9u^2 - 4u + 1$
c_9	$u^{10} + 2u^8 + 4u^6 + 3u^3 + u^2 - u + 1$
c_{10}	$u^{10} + u^9 - 2u^8 - 4u^7 + 5u^5 + 5u^4 - 2u^3 - 4u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{10}+y^9+7y^8-y^7+12y^6+6y^5+18y^4+16y^3+12y^2+4y+1$
c_2	$y^{10}+4y^9+8y^8+4y^7+6y^6-11y^5+12y^4-6y^3+5y^2+y+1$
c_3	$y^{10}+3y^9+2y^8-8y^7-35y^6+138y^4+105y^3+27y^2+5y+1$
c_4	$y^{10}+3y^9+14y^8+18y^7+3y^6+46y^5+33y^4-35y^3+28y^2-5y+1$
c_5, c_8	$y^{10}+9y^9+\cdots+2y+1$
c_6, c_{10}	$y^{10}-5y^9+\cdots-8y+1$
c_7	$y^{10}+4y^8-5y^7-12y^5+2y^4+7y^3+14y^2+7y+1$
c_9	$y^{10}+4y^9+12y^8+16y^7+18y^6+6y^5+12y^4-y^3+7y^2+y+1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.569171 + 0.652818I$ $a = -1.156860 - 0.167161I$ $b = 0.666955 - 0.329661I$	$0.80863 - 2.83685I$	$3.98230 + 13.24479I$
$u = -0.569171 - 0.652818I$ $a = -1.156860 + 0.167161I$ $b = 0.666955 + 0.329661I$	$0.80863 + 2.83685I$	$3.98230 - 13.24479I$
$u = 0.257088 + 1.121830I$ $a = -0.53465 + 2.12743I$ $b = 0.069226 + 1.285130I$	$-5.27004 + 6.36836I$	$-3.95341 - 6.63467I$
$u = 0.257088 - 1.121830I$ $a = -0.53465 - 2.12743I$ $b = 0.069226 - 1.285130I$	$-5.27004 - 6.36836I$	$-3.95341 + 6.63467I$
$u = -0.265511 + 1.239090I$ $a = 0.42180 - 1.89279I$ $b = 1.14707 - 1.48128I$	$-2.50173 - 4.70796I$	$-2.30544 + 6.58589I$
$u = -0.265511 - 1.239090I$ $a = 0.42180 + 1.89279I$ $b = 1.14707 + 1.48128I$	$-2.50173 + 4.70796I$	$-2.30544 - 6.58589I$
$u = -0.409125 + 0.329081I$ $a = 1.37279 - 0.74482I$ $b = 1.006320 + 0.639149I$	$0.60938 + 1.82644I$	$5.24506 - 2.77183I$
$u = -0.409125 - 0.329081I$ $a = 1.37279 + 0.74482I$ $b = 1.006320 - 0.639149I$	$0.60938 - 1.82644I$	$5.24506 + 2.77183I$
$u = 0.48672 + 1.42706I$ $a = -0.1030920 + 0.0771624I$ $b = -0.389573 - 0.258635I$	$-5.16077 - 2.93340I$	$2.03148 + 3.30765I$
$u = 0.48672 - 1.42706I$ $a = -0.1030920 - 0.0771624I$ $b = -0.389573 + 0.258635I$	$-5.16077 + 2.93340I$	$2.03148 - 3.30765I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{10} - u^9 + u^8 + 3u^7 + 4u^4 + 2u^2 + 1)(u^{60} + 6u^{59} + \cdots + 543u + 79)$
c_2	$(u^{10} + 2u^8 + 4u^7 + 2u^6 + 3u^5 + 6u^4 + 4u^3 + u^2 + u + 1)$ $\cdot (u^{60} + u^{59} + \cdots + 314u + 71)$
c_3	$(u^{10} + 5u^9 + \cdots + 5u + 1)(u^{60} + 4u^{59} + \cdots - 90u + 31)$
c_4	$(u^{10} - 5u^9 + 14u^8 - 24u^7 + 29u^6 - 24u^5 + 11u^4 + u^3 - 2u^2 - u + 1)$ $\cdot (u^{60} + 4u^{58} + \cdots + 28u + 3)$
c_5	$(u^{10} + u^9 + 5u^8 + 6u^7 + 12u^6 + 13u^5 + 15u^4 + 12u^3 + 9u^2 + 4u + 1)$ $\cdot (u^{60} + 4u^{59} + \cdots + 23u + 1)$
c_6	$(u^{10} - u^9 - 2u^8 + 4u^7 - 5u^5 + 5u^4 + 2u^3 - 4u^2 + 1)$ $\cdot (u^{60} + 2u^{59} + \cdots + 21u + 13)$
c_7	$(u^{10} + 3u^7 + 2u^6 + 2u^5 + 2u^4 + 3u^3 + 4u^2 + u + 1)$ $\cdot (u^{60} + u^{59} + \cdots + 1880u + 667)$
c_8	$(u^{10} - u^9 + 5u^8 - 6u^7 + 12u^6 - 13u^5 + 15u^4 - 12u^3 + 9u^2 - 4u + 1)$ $\cdot (u^{60} + 4u^{59} + \cdots + 23u + 1)$
c_9	$(u^{10} + 2u^8 + 4u^6 + 3u^3 + u^2 - u + 1)(u^{60} + u^{59} + \cdots - 22u + 1)$
c_{10}	$(u^{10} + u^9 - 2u^8 - 4u^7 + 5u^5 + 5u^4 - 2u^3 - 4u^2 + 1)$ $\cdot (u^{60} + 2u^{59} + \cdots + 21u + 13)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{10}+y^9+7y^8-y^7+12y^6+6y^5+18y^4+16y^3+12y^2+4y+1)$ $\cdot(y^{60}+14y^{59}+\cdots+122113y+6241)$
c_2	$(y^{10}+4y^9+8y^8+4y^7+6y^6-11y^5+12y^4-6y^3+5y^2+y+1)$ $\cdot(y^{60}+13y^{59}+\cdots+80466y+5041)$
c_3	$(y^{10}+3y^9+2y^8-8y^7-35y^6+138y^4+105y^3+27y^2+5y+1)$ $\cdot(y^{60}-16y^{59}+\cdots-65698y+961)$
c_4	$(y^{10}+3y^9+14y^8+18y^7+3y^6+46y^5+33y^4-35y^3+28y^2-5y+1)$ $\cdot(y^{60}+8y^{59}+\cdots+152y+9)$
c_5, c_8	$(y^{10}+9y^9+\cdots+2y+1)(y^{60}+46y^{59}+\cdots-77y+1)$
c_6, c_{10}	$(y^{10}-5y^9+\cdots-8y+1)(y^{60}-36y^{59}+\cdots-2183y+169)$
c_7	$(y^{10}+4y^8-5y^7-12y^5+2y^4+7y^3+14y^2+7y+1)$ $\cdot(y^{60}+21y^{59}+\cdots+11382388y+444889)$
c_9	$(y^{10}+4y^9+12y^8+16y^7+18y^6+6y^5+12y^4-y^3+7y^2+y+1)$ $\cdot(y^{60}+5y^{59}+\cdots-22y+1)$