wDiag	Ester's notat.	welded knot	virtual rep.	invertible	symmetric	negative symmetric
		w0	0	$K \underset{w}{\sim} -K$	$K \underset{w}{\sim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$
		w3$_1$	3.6	$K \underset{w}{\sim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\nsim} -K^\dagger$
		w3$_2$	3.7	$K \underset{w}{\sim} -K$	$K \underset{w}{\sim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$
$\beta_1 = \beta_2^\dagger$	4.6	w4$_{10}$ $\underset{w}{\sim}$ w4$_{11}$	4.66*	$K \underset{w}{\nsim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$
$\beta_3 = \beta_4^\dagger$	4.3	w4$_{12}$	4.94*	$K \underset{w}{\sim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\nsim} -K^\dagger$
β_5	4.9	w4$_8$ $\underset{w}{\sim}$ w4$_9$	4.106	$K \underset{w}{\sim} -K$	$K \underset{w}{\sim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$
$\beta_7 = (\beta_6)^\dagger$	4.5	w4$_3$	4.65*	$K \underset{w}{\sim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\nsim} -K^\dagger$
β_8	4.1	w4$_2$	4.71*	$K \underset{w}{\sim} -K$	$K \underset{w}{\sim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$
$\beta_9 = -\beta_{10}$ $\beta_{12} = -\beta_{11}$	4.4	w4$_6$	4.62*	$K \underset{w}{\nsim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\nsim} -K^\dagger$
$\beta_{13} = (\beta_{14})^\dagger$	4.7	w4$_4$	4.102	$K \underset{w}{\sim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\nsim} -K^\dagger$
$\beta_{15} = -\beta_{16}$	4.2	w4$_5$	4.99	$K \underset{w}{\nsim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$
$\beta_{17} = -(\beta_{18})^\dagger$ $\beta_{19} = -(\beta_{20})^\dagger$	4.8	w4$_7$	4.105	$K \underset{w}{\nsim} -K$	$K \underset{w}{\nsim} K^\dagger$	$K \underset{w}{\nsim} -K^\dagger$
β_{21}	4.10	w4$_1$	4.108	$K \underset{w}{\sim} -K$	$K \underset{w}{\sim} K^\dagger$	$K \underset{w}{\sim} -K^\dagger$

TABLE 1. Mathematica generated welded knot tabulation. Notational note: $-K$ means reverse orientation. $K^\dagger$ means change the signs of all arrows.