<< KnotTheory`  
Read more at http://katlas.org/wiki/KnotTheory.

BraidPlot[br = BR[2, {1, 1, 1, 1, 1}]]

Import["http://katlas.org/w/index.php?title=CableComponent.m&action=raw"];

(K = CableComponent[br, Knot[3, 1]]) // DrawMorseLink

KnotTheory::loading: Loading precomputed data in PD4Knots`.
KnotTheory::credits: Vogel's algorithm was implemented by Dan Carney in the summer of 2005 at the University of Toronto.
KnotTheory::credits: MorseLink was added to KnotTheory` by Siddarth Sankaran at the University of Toronto in the summer of 2005.
KnotTheory::credits: DrawMorseLink was written by Siddarth Sankaran at the University of Toronto in the summer of 2005.

General::stop: Further output of KnotTheory::credits will be suppressed during this calculation. >>

Jones[K][q]

\[1 + \frac{1}{q^{15}} - \frac{1}{q^{14}} - \frac{1}{q^{12}} + \frac{1}{q^{11}} + \frac{1}{q^{9}} - \frac{1}{q^{5}} - \frac{1}{q^{3}} + \frac{1}{q^{2}} - \frac{1}{q} - q\]