

<< KnotTheory`

Loading KnotTheory` version of January 18, 2008, 18:17:28.7446.
Read more at <http://katlas.org/wiki/KnotTheory>.

`L = Link["L7a6"];`

`H = HOMFLYPT[PD[L]][a, z]`

KnotTheory:loading: Loading precomputed data in PD4Links`.

KnotTheory::credits: The HOMFLYPT program was written by Scott Morrison.

$$-\frac{1}{a^3 z} + \frac{1}{a z} + \frac{2 z}{a^5} - \frac{4 z}{a^3} + \frac{3 z}{a} + \frac{z^3}{a^5} - \frac{4 z^3}{a^3} + \frac{z^3}{a} - \frac{z^5}{a^3}$$

`{HOMFLYPT[Mirror[L]][a, z], H /. a -> -1/a}`

$$\left\{ -\frac{a}{z} + \frac{a^3}{z} - 3 a z + 4 a^3 z - 2 a^5 z - a z^3 + 4 a^3 z^3 - a^5 z^3 + a^3 z^5, \right. \\ \left. -\frac{a}{z} + \frac{a^3}{z} - 3 a z + 4 a^3 z - 2 a^5 z - a z^3 + 4 a^3 z^3 - a^5 z^3 + a^3 z^5 \right\}$$

`U3 = PD[Mirror[BR[3, {1, -1, 2, -2, 1, -1, 2, -2}]]]`

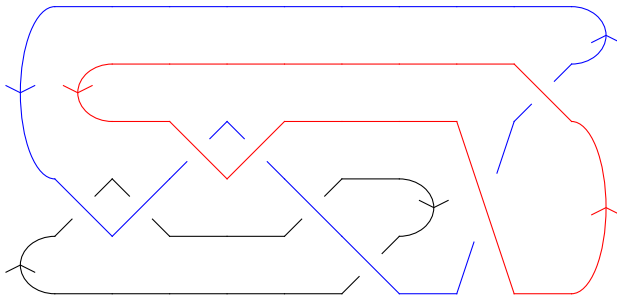
`PD[X[4, 16, 1, 9], X[1, 10, 2, 9], X[10, 8, 11, 5], X[11, 6, 12, 5],`
`X[2, 12, 3, 13], X[3, 14, 4, 13], X[14, 6, 15, 7], X[15, 8, 16, 7]]`

`DrawMorseLink[U3]`

KnotTheory::credits:

MorseLink was added to KnotTheory` by Siddarth ... he 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.



`HOMFLYPT[U3][a, z] // Simplify`

$$\frac{(-1 + a^2)^2}{a^2 z^2}$$

`l[L_] := Series[HOMFLYPT[L][E^(n x), E^x - 1 / E^x], {x, 0, 1}]`

`l[BR[2, {1, 1, 1, 1, 1, 1}]]`

$$n + (6 - 6 n^2) x + O[x]^2$$

`1[BR[2, {1, -1, 1, -1, 1, -1}]]`

$n + O[x]^2$

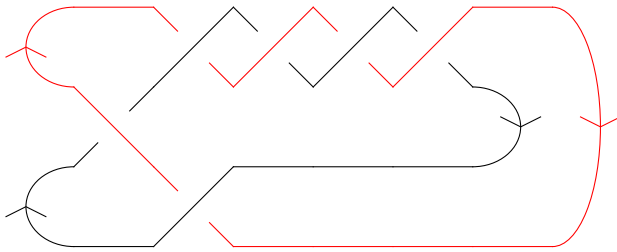
`1[BR[2, {1, -1, 1, -1, 1, -1, 1}]]`

1

`1[L]`

$n + (2 - 2n^2)x + O[x]^2$

`DrawMorseLink [BR[2, {1, 1, 1, 1, 1, 1}]]`



`BR [Knot [3, 1]]`

KnotTheory::credits :

The minimum braids representing the knots with ... by Thomas Gittings. See arXiv:math.GT/0401051.

`BR[2, {-1, -1, -1}]]`

`DrawMorseLink [BR [Knot [3, 1]]]`

