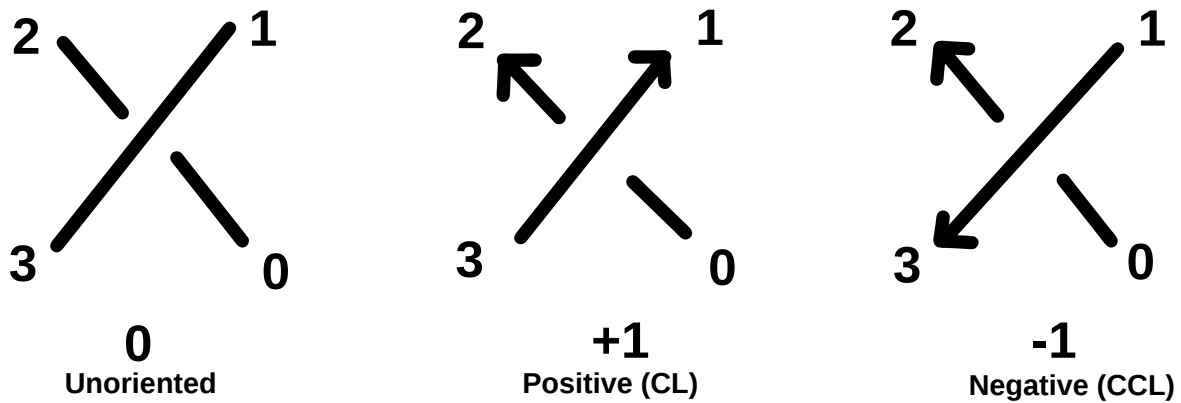
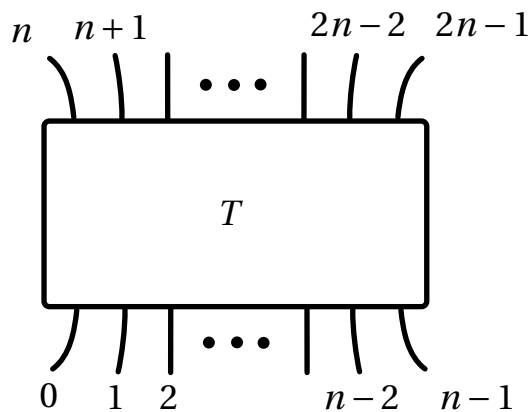


1 Conventions for crossings



2 Conventions for tangles

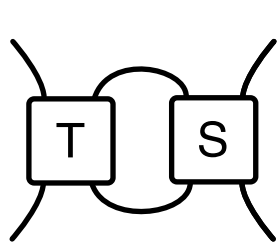
A tangle T is a rectangular piece of a projection with $2n$ incoming strands, where these strands are numbered as shown.



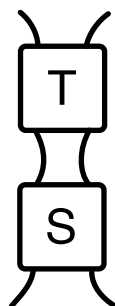
Conventions for operations and rational tangles follow

<http://homepages.math.uic.edu/~kauffman/VegasAMS.pdf>

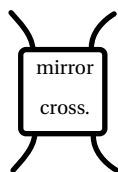
and are shown on the next page.



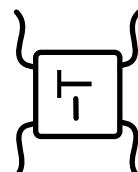
$T + S$



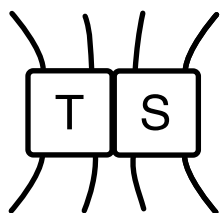
$T * S$



$-T$



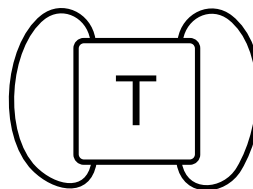
$\frac{1}{T}$



$T | S$



Numerator closure



Denominator closure

Basic rational tangles



-2



-1



0



1



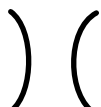
2



$\frac{1}{2}$



$-\frac{1}{1}$



∞



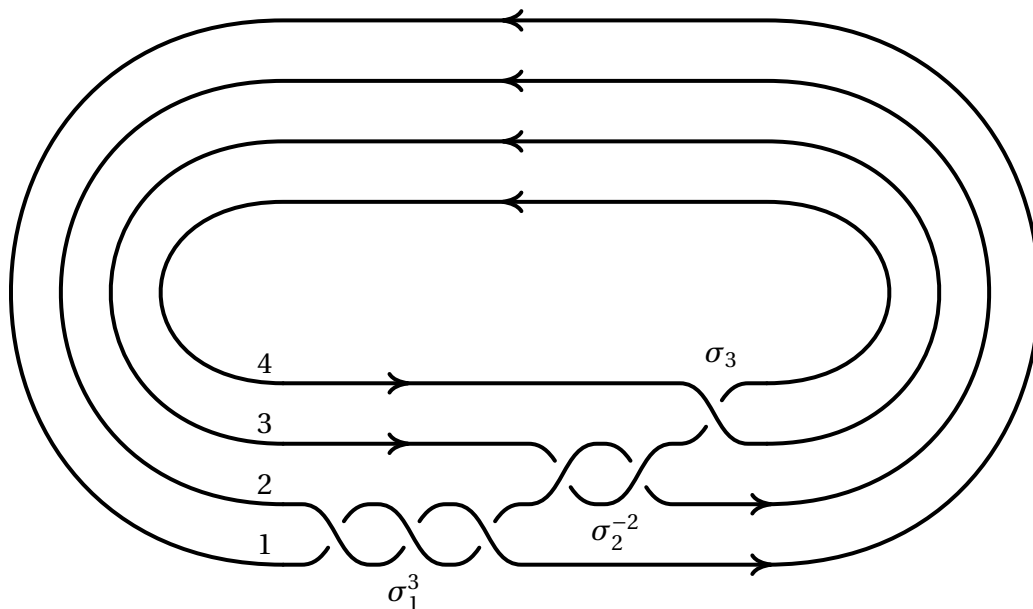
$\frac{1}{1}$



$\frac{1}{2}$

3 Conventions for braids

The convention for SnapPy 3.0/Spherogram 2.0 and newer is illustrated by the braid closure of $\sigma_1^3 \sigma_2^{-2} \sigma_3$ corresponding to `Link(braid_closure=[1, 1, 1, -2, -2, 3])`. Note that a positive braid has all positive crossings in the sense of Section 1.



In earlier versions of SnapPy, the sign of the crossings was reversed, e.g. the same braid would have been:

