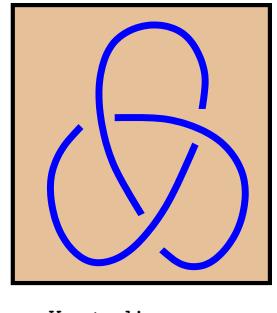
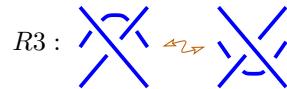
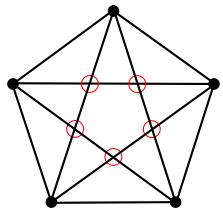


## Links [Ad].

Link diagrams up to planar isotopy and Reidemeister moves:

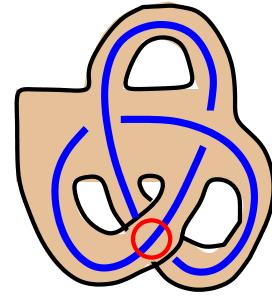


Knot diagram



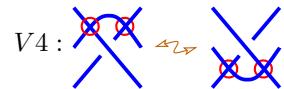
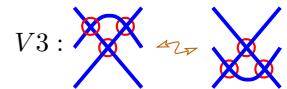
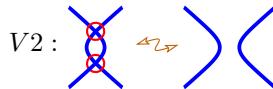
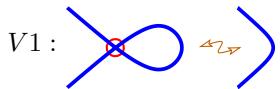
Virtual crossing

## Virtual links [Ka].

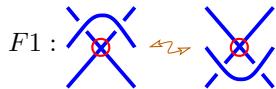


Virtual knot

Virtual Reidemeister moves:



Forbidden moves:

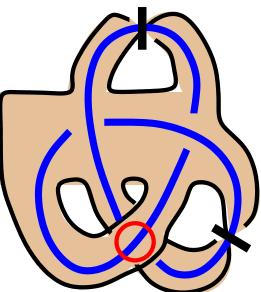
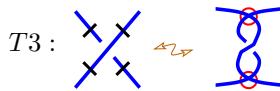
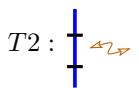
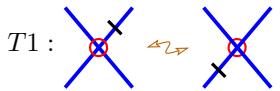


## Welded links:

$(R1, R2, R3), \quad (V1, V2, V3, V4), \quad F1.$

## Twisted links [Bou].

Twisted moves:



Twisted knot

## REFERENCES

- [Ad] C. Adams, *The knot book*, AMS, 2001.
- [Bou] M. O. Bourgoin, *Twisted link theory*, Algebraic & Geometric Topology **8** (2008) 1249–1279.
- [Ka] L. Kauffman, *Virtual knot theory*, European Journal of Combinatorics, **20** (1999) 663–690.