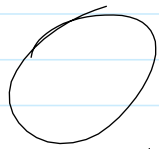
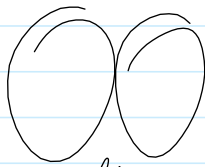


student of Sebastian Baader.

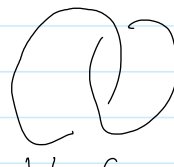
1. knots, links, and twisted bands.



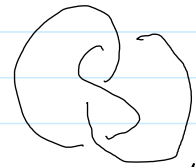
unknot



unlink

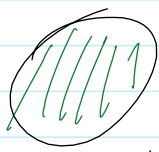


Hopf



Trefoil

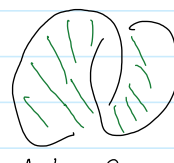
Bound surfaces:



unknot



unlink



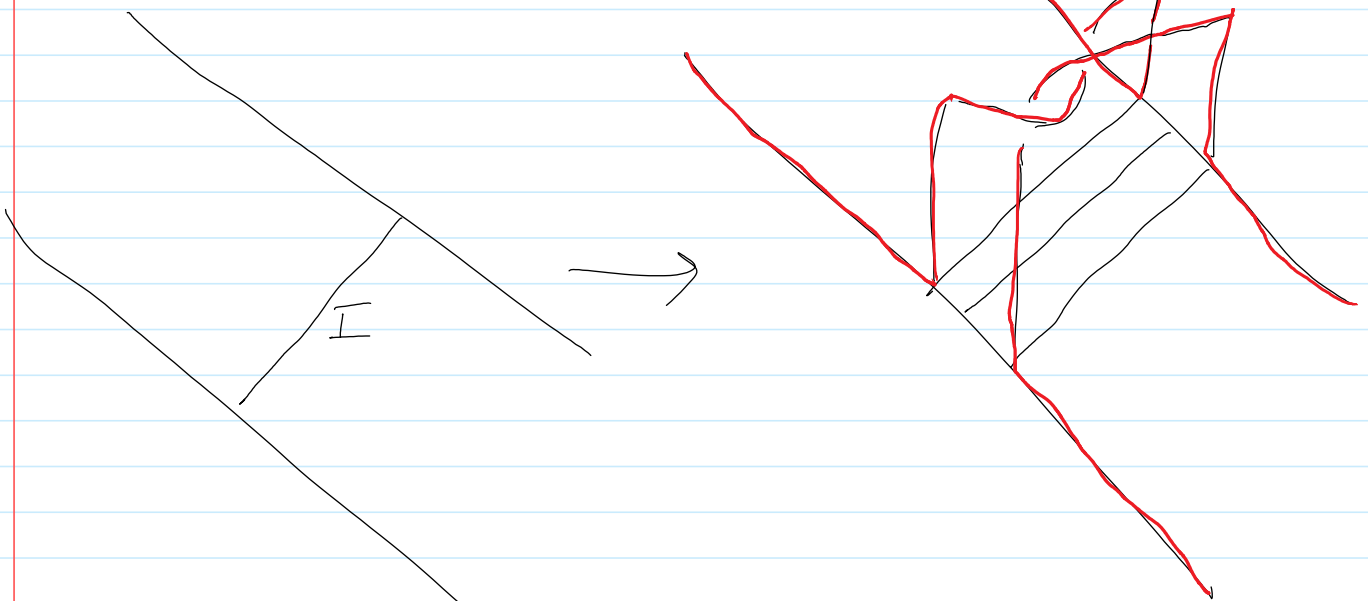
Hopf



Trefoil

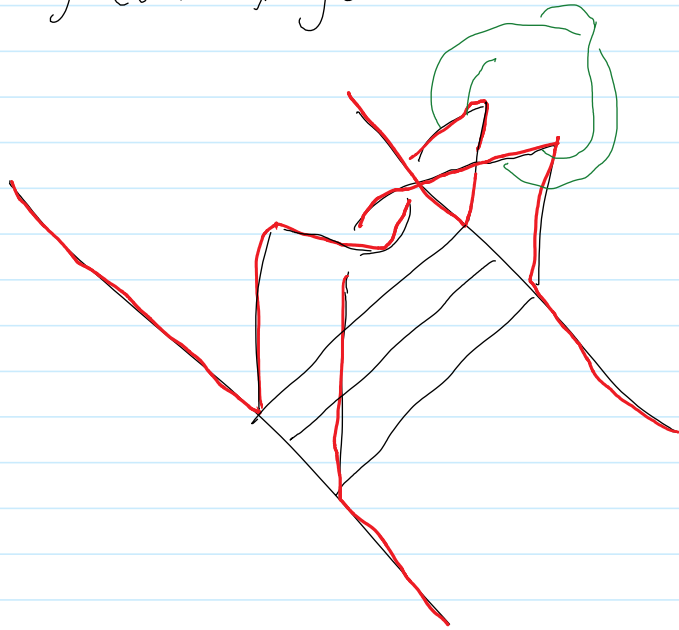
2. Plumbing and signature

DEF "Plumbing of a Hopf band along an interval I "



plumbing of a trefoil is the same with extra green layer:

extra green layer:



Question: Does Hopf plumbing gives more knots than plumbing trefoils?

Answer: YES

Example: A plumbing of 4 Hopf bands that is not a plumbing of 2 trefoils
(Drawing too complicated)

Giroux, Goodman 2006: Allowing also the inverse "de-plumbing", the two things become the same.

Claim By plumbing and de-plumbing positive and negative exactly all fibered links arise

(PF in Giroux—Goodman 2006)

<http://arxiv.org/abs/math/0509555>