

Paula TRUÖL : *Strongly quasipositive knots are concordant to infinitely many strongly quasipositive knots*

Knots are smooth embeddings of the (oriented) circle \mathbb{S}^1 into \mathbb{R}^3 (or into the 3-sphere), usually studied up to an equivalence relation called ambient isotopy. A natural generalization in dimension 4 of the question whether certain knots are isotopic to the trivial knot is the concept of concordance, another equivalence relation on the set of knots.

We show that every non-trivial strongly quasipositive knot is smoothly concordant to infinitely many pairwise non-isotopic strongly quasipositive knots. In contrast to our result, it was conjectured by Baker that smoothly concordant strongly quasipositive fibered knots are isotopic. Our construction uses a satellite operation whose companion is a slice knot with maximal Thurston-Bennequin number -1 .

In the talk, we will define all the relevant terms necessary to understand the theorem in the title, and explain the context of this result.

Jeudi 24 novembre, 15h-16h, Amphithéâtre Yoccoz.
