

Michel Boileau

Title: On commensurability classes of hyperbolic knot complements:

Abstract: We study commensurability classes of hyperbolic knot complements in \mathbb{S}^3 . In the generic case of knots without hidden symmetries, we show that knot complements which are commensurable are cyclically commensurable, and that there are at most 3 distinct hyperbolic knot complements in the same commensurability class. Moreover if two hyperbolic knot without hidden symmetries have commensurable complements, then they are fibered with the same genus and chiral. Characterization of commensurability classes of complements of periodic knots without hidden symmetries is also given. This is a joint work with Steve Boyer (UQAM Montréal), Radu Cebanu (UQAM Montréal) and Geneviève Walsh (Tufts University USA).