

Titel: Slicing knots in definite 4-manifolds

Abstract: I will give an overview on questions related to slicing knots in 4-manifolds more general than the 4-ball. Then, I will focus on the CP^2 -slicing number of knots, which is by definition the smallest integer m such that the given knot bounds a properly embedded, null-homologous disk in $m(CP^2)$ minus a ball. Specifically, I will give a lower bound on the smooth CP^2 -slicing number and an upper bound on the topological CP^2 -slicing number, and describe situations where these quantities are large/small/distinct. The talk will be based on joint work with Alexandra Kjuchukova, Allison Miller, and Sumeyra Sakalli.