## Sungkyung Kang

## Title: Topologically and rationally slice knots

**Abstract:** A knot in  $S^3$  is topologically slice if it bounds a locally flat disk in  $B^4$ . A knot in  $S^3$  is rationally slice if it bounds a smooth disk in a rational homology ball. We prove that the smooth concordance group of topologically and rationally slice knots admits a  $\mathbb{Z}^{\infty}$  subgroup. All previously known examples of knots that are both topologically and rationally slice were of order two. This is an ongoing joint work with Jennifer Hom and JungHwan Park.