

Heegaard Floer homology and Dehn surgery

Yi Ni, CalTech

Abstract: In this course, we will give a brief introduction to Heegaard Floer homology, with focus on its applications to Dehn surgery. We may cover the following topics: the construction of Heegaard Floer and knot Floer chain complexes, basic properties, surgery exact triangles, genus bound and fiberedness, the mapping cone formula for Dehn surgery, correction terms, L-space surgery.