

SCGP Weekly Talk: Peter Ozsvath
Tuesday, August 27 · 1:15 – 2:15pm

Location: 102

Title: Heegaard Floer homology

Abstract: Heegaard Floer homology is an invariant for low-dimensional objects, inspired by gauge theory, and using constructions from symplectic geometry. Heegaard Floer homology can be used to answer problems in knot theory, questions about three-manifolds, and problems in four-dimensional differential topology. I will sketch the construction of Heegaard Floer homology, outline some of its applications. The original construction of Heegaard Floer homology is joint work with Zoltan Szabo. Time permitting, I will also describe recent developments in this now active area, including work of joint work with others, including Ciprian Manolescu, Sucharit Sarkar, Robert Lipshitz, and Dylan Thurston.