ALLISON MOORE, University of California, Davis

Surgery on links and the d-invariant

The d-invariants are a set of rational numbers associated to the Heegaard Floer homology of a rational homology sphere. These invariants are quite useful and have many important applications in low-dimensional topology. We will describe a formula to compute the d-invariants of integral surgeries on two-component L–space links of linking number zero in terms of the h-function. This generalizes a formula of Ni-Wu in the case of knots, and relies on the Manolescu-Ozsvath link surgery complex. For linking number zero links, we will also describe the behavior of the d-invariants invariants under crossing changes, concordance, and mention some related results on the characterization of L-space surgery slopes. This is joint work with E. Gorsky and B. Liu.