

February 15: Eric Rains (UC Davis), “New deformations of Coxeter groups.” FOLLOWED BY DINNER.

Associated to every Coxeter group (a group generated by involutions subject to “braid relations”) is a family of “Hecke algebras”, which deform the corresponding group algebra. In light of the significance of Hecke algebras (esp. in the structure of algebraic groups over finite and p -adic fields), it is natural to ask whether these are the *only* nice deformations that exist. I’ll describe some work with Etingof on deformations of certain index 2 subgroups of Coxeter groups that as special cases include generalizations of Hecke algebras.