1086-05-1939 **Eric Rains** and **Monica Vazirani***, One Shields Ave, Davis, CA 95616. *Deformations of permutation representations of Coxeter groups.*

One can deform a Coxeter group W to its corresponding Hecke algebra H(W) and a standard parabolic subgroup W_I to a corresponding subalgebra H(W_I). However, this is not the case for every subgroup U, even if U is conjugate parabolic. Sometimes one can still deform the associated permutation representation on cosets W/U.

Our motivating example is the action of the symmetric group on fixed-point-free involutions by conjugation.

In this talk, I'll define a larger class of "quasiparabolic" subgroups and more generally quasiparabolic W-sets, and show that they admit a flat deformation over Z[q] to a representation of H(W). They also share other nice properties with W/W_I such as a shellable Bruhat order. (Received September 24, 2012)