

## **Unitary representations of dihedral graded Hecke algebras**

### **Abstract:**

Work of Barbasch and Ciubotaru has described spherical unitary representations for split classical and exceptional  $p$ -adic groups by reduction to their associated graded Hecke algebras. We consider graded Hecke algebras associated to dihedral groups and root systems. We report on progress in understanding the support of spherical unitary representations of these graded Hecke algebras and the eigenvalues of an operator attached to the longest element in the odd dihedral case.