

**December 14:** Elizabeth Mann (MIT), “Real groups, Satake isomorphism and Vogan duality.”

I’ll describe first results of a program, underway with I. Grojnowski, to extend the geometric Satake isomorphism to the real group setting. We generalize both sides of Kazhdan & Lusztig’s theorem realizing the affine Hecke algebra as perverse sheaves on the affine flag variety and as coherent sheaves on the Steinberg variety. I’ll describe the appropriate generalization of each side, as a module for the affine Hecke algebra, and explain the relation to Vogan’s character-multiplicity duality for real groups.