

December 2: Peter McNamara(MIT), “Representations of metaplectic groups and their Whittaker functions.”

In this talk we consider the representation theory of metaplectic groups over local fields. The family of groups under consideration consists of central extensions of reductive groups over local fields, by finite cyclic groups. Recently, there has been interest from a number theoretic viewpoint in the computation of Whittaker functions associated to such groups. We will present some recent work in computing such functions that connects to the geometry of crystal graphs realised as Mirkovic-Vilonen cycles in the affine Grassmannian.