

September 28: David Kazhdan (Hebrew University), “Some examples of Hecke algebras for two-dimensional local fields.” FOLLOWED BY DINNER.

Let K be a local non-archimedean field and let $F = K((t))$ and let G be a split semi-simple group. We study certain analogs of spherical and Iwahori Hecke algebras for representations of the group $G(F)$ and its central extension G' . For instance our spherical Hecke algebra corresponds to the subgroup $G(A)$ of $G(F)$ where A is the subring $O((t))$ where O is the ring of integers of K . It turns out that for generic level this algebra is trivial; however, it turns out to be quite large on the critical level. On the other hand the corresponding Iwahori-Hecke algebra has the same size for any level.