
BIN XU, University of Calgary

On Arthur packets of p -adic split odd orthogonal groups

The irreducible admissible representations of Arthur class are the local components of automorphic representations. They are conjectured to be parametrized by the Arthur parameters, which form a subset of the usual Langlands parameters. The set of irreducible representations associated with a single Arthur parameter is called an Arthur packet. Following Arthur's classification theory of automorphic representations of classical groups, the Arthur packets are now known in these cases. On the other hand, Mœglin independently constructed these packets in the p -adic case by using very different methods. In this talk, I would like to give a survey on Mœglin's construction in the special case of split odd orthogonal groups, and I will also explain how it is connected with Arthur's theory.