

COLLOQUIUM

P-ADIC INNER FORMS AND INVARIANTS OF LANGLANDS PARAMETERS

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NECKERS 156 | TIME: 3:00PM
RECEPTION IMMEDIATELY FOLLOWING IN THE MATH LIBRARY.

The local Langlands conjecture for a p -adic group predicts a relationship between irreducible complex representations of the group and certain homomorphisms from the local Langlands group into the Langlands dual group. The latter homomorphisms are called Langlands parameters, and the representations of the p -adic group are partitioned into finite sets, called L-packets, indexed by Langlands parameters.

It is natural to expect some properties that all members in an L-packet have in common. Also, it can be questioned what kinds of data can be preserved by inner twistings which define inner forms. This talk will focus on such invariants. We begin with background and basic concepts in the representation theory of p -adic groups, and survey some known cases on the local Langlands conjecture. We finally discuss the invariants of Langlands parameters.