

abstract

JOINT IAS/PU NUMBER THEORY SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

From the trace formula and the global Langlands correspondence one can infer the existence of a particular rigid ℓ -adic local system on the projective line with tame ramification at 0 and wild ramification, of the mildest possible kind, at infinity, for any simple algebraic group. These ℓ -adic local systems and their characteristic 0 counterparts have been constructed in some cases by Deligne and Katz. We will explain how to construct such a local system in the characteristic 0 case, uniformly for an arbitrary simple algebraic group, using the formalism of opers introduced by Beilinson and Drinfeld. Among other things, it provides an example of the geometric Langlands correspondence with wild ramification. This is joint work with Dick Gross.