abstract

Joint IAS/PU Number Theory Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

A continuous representation of a profinite group induces a continuous pseudorepresentation, where a pseudorepresentation is the data of the
characteristic polynomial coefficients. We discuss the geometry of the resulting map from the moduli formal groupoid of representations to the moduli formal scheme of pseudorepresentations.

We find that, relative to the moduli of pseudorepresentations, the groupoid of continuous representations is algebraizable and universally closed, being representable by a finitely presented algebraic stack. We also find projective subschemes of the moduli space of representations corresponding to notions of stability for representations. In the case of moduli of representations of the Galois group of a p-adic local field, we cut out loci of representations satisfying conditions from p-adic Hodge theory, generalizing a result of Kisin.