

abstract

Joint IAS/PU Number Theory Seminar
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

Let X be a locally symmetric variety, \bar{X} its Baily-Borel compactification, \bar{X}^{rbs} its reductive Borel-Serre compactification and $p: \bar{X}^{\text{rbs}} \rightarrow \bar{X}$ the canonical map. We prove that the derived direct image sheaf $Rp_* \mathbb{Q}$ is the realization of a canonical motive associated to the variety \bar{X} . This is non trivial since \bar{X}^{rbs} is not an algebraic variety in general. (Joint with S. Zucker)