

Speaker: Vincent Pilloni

Title: Higher Hida theory

Abstract: The aim of Higher Hida theory is to understand the ordinary part of integral higher coherent cohomology of Shimura varieties. This is a continuation of classical Hida theory which focuses on the degree 0 part. In this talk, we want to explain how the theory works for the Hilbert modular varieties. These are the simplest Shimura varieties attached to a non-split reductive group. A new feature of the theory in the non-split case is that it produces canonical Jacquet-Langlands isomorphisms between the ordinary cohomology of different quaternionic Shimura varieties in different degrees. This is joint work with G. Boxer.