

Séminaire de théorie des nombres Londre – Paris

Le 16 novembre 2009 à 11h (à l'IHP)

On the ordinary part of cohomology

Exposé de Matthew Emerton (Northwestern University, Evanston, USA)

Résumé : In this talk I will explain the relationship between the p -adically completed cohomology groups associated to reductive groups over \mathbb{Q} and the ordinary part of cohomology as introduced by Hida and studied by him and others.

The connection is provided by the functor of ordinary parts and its derived functors, and I will review these notions. I will also explain a general duality property for the functor of ordinary parts, which when applied in the context of p -adically completed cohomology, gives Poincaré duality for the ordinary part of cohomology.