Séminaire de théorie des nombres

Le 19 juin 2017 à 14h (Jussieu)

The homotopy exact sequence for overconvergent isocrystals

Exposé de Christopher Lazda (Universitá di Padova)

Résumé : The overconvergent fundamental group of a variety in characteristic p is that attached to the category of overconvergent isocrystals via Tannakian duality. If $f : X \to S$ is a smooth, projective morphism of smooth varieties, with fibre X_s, I will explain how to show that the associated sequence of overconvergent fundamental groups $\pi_1(X_s) \to \pi_1(X) \to \pi_1(S) \to 1$ is exact. One of the key components of the proof is to bootstrap up dos Santos' study of infinitesimal equivalence relations from the algebraic to the formal and analytic contexts.