

# Séminaire de théorie des nombres

Le 24 novembre 2008 à 14h

## On uniqueness of $p$ -adic period morphisms

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**Résumé :** For algebraic varieties over local fields of mixed characteristic  $(0, p)$ , de Rham cohomology and  $p$ -adic geometric étale cohomology with all their structures are related by the  $p$ -adic period morphisms. We have three general constructions of such morphisms : the syntomic, the "almost étale", and the motivic one. I will briefly review these constructions and then show how the motivic approach implies a uniqueness criterium for the  $p$ -adic period maps and, in turn, the equality of the maps constructed by the three general methods.