Séminaire de théorie des nombres

Le 12 juin 2017 à 14h (PRG)

Reductions of Galois representations of small slopes

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Résumé : It is of interest to describe the reductions of irreducible crystalline two-dimensional representations of the Galois group of $\mathbb{Q}_p$. One is now able to do this for all weights if the slope is small, using the compatibility between the p-adic and mod p Local Langlands Correspondences with respect to the process of reduction, and some intensive computations on the tree.

Say that a weight k is exceptional for a (half-integral) slope v if $k-2$ is twice v modulo $p-1$. In this talk, we shall concentrate on describing the reduction at exceptional congruence classes of weights where the problem is much harder and the results, when forthcoming, are more surprising.