

# Séminaire de théorie des nombres

Le 21 avril 2008 à 15h30

## $\Lambda$ -adic modular symbols and several variable $p$ -adic L-functions over totally real fields

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**Résumé :** We recall Hida's construction of the universal nearly-ordinary Hecke algebra for totally real number fields. The main theorem of Hida's theory allows us to lift a classical modular form  $f_0$  to a homomorphism of this Hecke algebra and by specializing at various integer weights we get a family of cusp forms  $f_{(n,v)}$ . One can attach in a natural way certain cohomology classes to these cusp forms and we prove a control theorem for these cohomology groups. We then construct a  $p$ -adic L-function which interpolates single variable  $p$ -adic L-functions attached to  $f_{(n,v)}$ .