

# Séminaire de théorie des nombres

Le 14 juin 2010 à 14h

## Shimura curves, Coleman families and $p$ -adic $L$ -functions

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**Résumé :** In this talk, we will describe a method for assigning a  $p$ -adic  $L$ -function to a pair  $(F, K)$ , where  $F$  is a Coleman family of modular forms and  $K$  is a real quadratic field. This  $p$ -adic  $L$ -function interpolates central values of classical  $L$ -functions associated to specializations of  $F$  base changed to  $K$ . In certain situations, These  $p$ -adic  $L$ -functions display exceptional zero phenomena and encode information about algebraic points on modular abelian varieties.