

## **abstract**

GALOIS REPRESENTATIONS AND AUTOMORPHIC FORMS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

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Let  $F$  be a locally compact non-Archimedean field,  $p$  its residue characteristic and  $G$  a connected reductive algebraic group over  $F$ . The classical Satake isomorphism describes the Hecke algebra (over the field of complex numbers) of double classes in  $G$  with respect to a special maximal compact subgroup  $K$  of  $G$ . In our setting  $K$  is a slightly smaller special parahoric subgroup, we introduce an absolutely irreducible smooth representation of  $K$  on a vector field  $V$  over a field of characteristic  $p$ , and we get a description of an analogous Hecke algebra with respect to  $V$ . We thus generalize work of F. Herzig treating the case of unramified groups  $G$ .

But in our general situation the Hecke algebra can be non-commutative. (This is joint work with M.-F. Vignéras.)