



## Workshop on modular Iwahori-Hecke algebras

17th to 21st March 2014

Humboldt University, Institute of Mathematics  
Rudower Chaussee 25, 12489 Berlin-Adlershof, Germany.

### Contents and Aim:

A modular Iwahori-Hecke algebra is the Hecke algebra, with coefficients in a field of characteristic  $p$ , of an Iwahori-subgroup in the group  $G(F)$  of  $F$ -points a reductive group  $G$  over a local field  $F$  with residue characteristic  $p$ . More generally, one may replace the Iwahori subgroup by its maximal  $p$ -Sylow subgroup. These algebras have been studied systematically first by Marie-France Vigneras. It is well known that the more classical and familiar theory of Iwahori-Hecke algebras over the complex coefficient field is very rich and plays an important role in various branches of representation theory and number theory. The theory of their modular versions, whose development is still in a very early stage, appears to be even more involved. It is reasonable to expect that it may play a role in the searched for mod- $p$ - or  $p$ -adic local Langlands correspondence, a topic of high interest in current number theory. The aims of the workshop are twofold: on the one hand, bringing together experts in the field of modular Iwahori-Hecke algebras in order to discuss recent developments; on the other hand, embedding the topic into a larger picture by comparing it with developments in the theory of related or similar modular algebras (e.g. modular Cherednik algebras), and by presenting techniques of potential future relevance (e.g. categorification).

### Speakers:

Noriyuki Abe (Hokkaido University)  
Konstantin Ardakov (University of Oxford)  
Gwyn Bellamy (University of Glasgow)  
Kenneth Brown (University of Glasgow)  
Elmar Große-Klönne (Humboldt Universität zu Berlin)  
Guy Henniart (Université Paris Sud)  
Steffen König (Universität Stuttgart)  
Jan Kohlhaase (Universität Münster)  
Karol Koziol (Columbia University)  
Rachel Ollivier (Columbia University)  
Laura Peskin (California Institute of Technology)  
Tobias Schmidt (Humboldt Universität zu Berlin)  
Catharina Stroppel (Universität Bonn)  
Marie-France Vigneras (Université Paris Diderot - Paris 7)

### Audience:

We warmly invite anyone interested in this area to attend.

### Organizers:

Elmar Große-Klönne (HUB)  
Peter Schneider (Univ. Münster)

If you have any questions then please do not hesitate to get in touch with us by email. Our email addresses are respectively:

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[pschnei@math.uni-muenster.de](mailto:pschnei@math.uni-muenster.de)

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