Groups with a root group datum

Pierre-Emmanuel Caprace (Université Libre de Bruxelles) Bertrand Rémy (University Lyon 1)

Root group data provide the abstract combinatorial framework common to all groups of Lie-type, including groups of Kac-Moodytype. They may be viewed as a refinement of the notion of BN-pairs; in particular, any group with a root group datum possesses a natural action on a building (in fact: two buildings).

The mini-course will explore the basic structure theory of groups endowed with a root group datum. More precisely, we envisage to discuss the following themes:

existence, presentations, simplicity and classification results.