

Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

- DATE September 1 (Wed), 2010, 16:30–18:00
- PLACE Room 002, Graduate School of Mathematical Sciences
- SPEAKER **Bernhard Mühlherr** (Justus-Liebig-Universität Giessen)
- TITLE Groups of Kac–Moody type
- ABSTRACT Groups of Kac–Moody type are natural generalizations of Kac–Moody groups over fields in the sense that they have an RGD-system. This is a system of subgroups indexed by the roots of a root system and satisfying certain commutation relations. Roughly speaking, there is a one-to-one correspondence between groups of Kac–Moody type and Moufang twin buildings. This correspondence was used in the last decade to prove several group theoretic results on RGD-systems and in particular on Kac–Moody groups over fields.
- In my talk I will explain RGD-systems and how they provide twin buildings in a natural way. I will then present some of the group theoretic applications mentioned above and describe how twin buildings are used as a main tool in their proof.