

Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

- DATE January 14 (Tue), 2014, 16:30–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Masaki Mori** (森真樹) (the University of Tokyo)
- TITLE A cellular classification of simple modules of the Hecke–Clifford superalgebra
- ABSTRACT The Hecke–Clifford superalgebra is a super version of the Iwahori–Hecke algebra of type A. Its simple modules are classified by Brundan, Kleshchev and Tsuchioka using a method of categorification of affine Lie algebras. However their constructions are too abstract to study in practice. In this talk, we introduce a more concrete way to produce its simple modules with a generalized theory of cellular algebras which is originally developed by Graham and Lehrer. In our construction the key is that there is a right action of the Clifford superalgebra on the super-analogue of the Specht module. With the help of the notion of the Morita context, a simple module of the Hecke–Clifford superalgebra is made from that of the Clifford superalgebra.