

Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

(トポロジー火曜セミナーと合同)

DATE February 2 (Tue), 2010, 16:30–18:00

PLACE Room 056, Graduate School of Mathematical Sciences

SPEAKER **Fanny Kassel** (Orsay)

TITLE Deformation of compact quotients of homogeneous spaces

ABSTRACT Let G/H be a reductive homogeneous space. In all known examples, if G/H admits compact Clifford–Klein forms, then it admits “standard” ones, by uniform lattices of some reductive subgroup L of G acting properly on G/H . In order to obtain more generic Clifford–Klein forms, we prove that for L of real rank 1, if one slightly deforms in G a uniform lattice of L , then its action on G/H remains properly discontinuous. As an application, we obtain compact quotients of $SO(2, 2n)/U(1, n)$ by Zariski-dense discrete subgroups of $SO(2, 2n)$ acting properly discontinuously.