

Lie Groups and Representation Theory Seminar at the University of Tokyo

リ一群論・表現論セミナー

- DATE November 20 (Tue), 2012, 16:30–17:30
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Ali Baklouti** (Sfax University)
- TITLE On the geometry of discontinuous subgroups acting on some homogeneous spaces
- ABSTRACT Let G be a Lie group, H a closed subgroup of G and Γ a discontinuous subgroup for the homogeneous space G/H . I first introduce the deformation space $\mathcal{T}^{K\circ}(\Gamma, G, H)$ of the action of Γ on G/H in the sense of Kobayashi and some of its refined versions, namely the Clifford–Klein space of deformations of the form $\mathcal{X} = \Gamma \backslash G/H$. The deformation space $\mathcal{T}^{G\circ}(\Gamma, G, H)$ of marked (G, H) - structures on \mathcal{X} in the sense of Goldman is also introduced. As an important motivation, I will explain the connection between the spaces $\mathcal{T}^{K\circ}(\Gamma, G, H)$ and $\mathcal{T}^{G\circ}(\Gamma, G, H)$ and study some of their topological features, namely the rigidity in the sense of Selberg–Weil–Kobayashi and the stability in the sense of Kobayashi–Nasrin. The latter appears to be of major interest to write down the connection explicitly.