

Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

- DATE January 18 (Tue), 2011, 17:00–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Pierre Clare** (Université d'Orleans & the University of Tokyo)
- TITLE Connections between Noncommutative Geometry and Lie groups representations
- ABSTRACT One of the principles of Noncommutative Geometry is to study singular spaces that the tools of classical analysis like algebras of continuous functions fail to describe, replacing them by more general C^* -algebras. After recalling fundamental facts about C^* -algebras, Hilbert modules and group C^* -algebras, we will present constructions and results aiming to understand principal series representations and Knapp–Stein theory in the noncommutative geometrical framework. Eventually we will explain the relationship between the analysis of reduced group C^* -algebras and the computation of the Connes–Kasparov isomorphisms.