

**Lie Groups and Representation Theory Seminar
at the University of Tokyo**

リー群論・表現論セミナー

- DATE October 2 (Tue), 2007, 16:30–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Pablo Ramacher** (Göttingen University)
- TITLE Invariant integral operators on affine G -varieties and their kernels
- ABSTRACT We consider certain invariant integral operators on a smooth affine variety M carrying the action of a reductive algebraic group G , and assume that G acts on M with an open orbit. Then M is isomorphic to a homogeneous vector bundle, and can locally be described via the theory of prehomogenous vector spaces. We then study the Schwartz kernels of the considered operators, and give a description of their singularities using the calculus of b -pseudodifferential operators developed by Melrose. In particular, the restrictions of the kernels to the diagonal can be described in terms of local zeta functions.