

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

## リー群論・表現論セミナー

- DATE May 29 (Tue), 2007, 16:30–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Karl-Hermann Neeb** (Technische Universität Darmstadt)
- TITLE A host algebra for the regular representations of the canonical commutation relations
- ABSTRACT We report on joint work with H. Grundling (Sydney). The concept of a host algebra generalises that of a group  $C^*$ -algebra to groups which are not locally compact in the sense that its non-degenerate representations are in one-to-one correspondence with representations of the group under consideration. A full host algebra covering all continuous unitary representations exist for an abelian topological group if and only if it (essentially) has a locally compact completion. Therefore one has to content oneself with certain classes of representations covered by a host algebra. We show that there exists a host algebra for the set of continuous representations of the countably dimensional Heisenberg group corresponding to a non-zero central character.
- REMARK Neeb 教授は 5 月 26 日 (土)・27 日 (日) に東京大学で行われる第 2 回高木レクチャーで招待講演をされます。  
高木レクチャーのホームページ：  
[http://www.kurims.kyoto-u.ac.jp/~toshi/jjm/JJM/JJM\\_JHP/contents/takagi\\_jp/jjm-takagi2\\_jp.htm](http://www.kurims.kyoto-u.ac.jp/~toshi/jjm/JJM/JJM_JHP/contents/takagi_jp/jjm-takagi2_jp.htm)  
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