

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

リー群論・表現論セミナー

- DATE October 30 (Tue), 2007, 16:30–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Matumoto Hisayosi** (松本久義) (University of Tokyo)
- TITLE On Weyl groups for parabolic subalgebras
- ABSTRACT Let \mathfrak{g} be a complex semisimple Lie algebra. We call a parabolic subalgebra \mathfrak{p} of \mathfrak{g} normal, if any parabolic subalgebra which has a common Levi part with \mathfrak{p} is conjugate to \mathfrak{p} under an inner automorphism of \mathfrak{g} . For a normal parabolic subalgebra, we have a good notion of the restricted root system or the little Weyl group. We have a comparison result on the Bruhat order on the Weyl group for \mathfrak{g} and the little Weyl group. We also apply this result to the existence problem of the homomorphisms between scalar generalized Verma modules.