

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

**リー群論・表現論セミナー**

- DATE May 27 (Tue), 2008, 16:30–18:00
- PLACE Room 126, Graduate School of Mathematical Sciences
- SPEAKER **Atsumu Sasaki** (笹木集夢) (Waseda University)
- TITLE Visible actions on multiplicity-free spaces
- ABSTRACT The holomorphic action of a Lie group  $G$  on a complex manifold  $D$  is called strongly visible if there exist a real submanifold  $S$  such that  $D' := G \cdot S$  is open in  $D$  and an anti-holomorphic diffeomorphism  $\sigma$  which is an identity map on  $S$  and preserves each  $G$ -orbit in  $D'$ .
- In this talk, we treat the case where  $D$  is a multiplicity-free space  $V$  of a connected complex reductive Lie group  $G(\mathbb{C})$ , and show that the action of a compact real form of  $G(\mathbb{C})$  on  $V$  is strongly visible.