Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

DATE May 25 (Fri), 2007, 14:30–16:00

PLACE Room 122, Graduate School of Mathematical Sciences

- SPEAKER
 Nobutaka Boumuki (坊向伸隆)

 (Osaka City University, Advanced Mathematical Institute)
 - TITLE The classification of simple irreducible pseudo-Hermitian symmetric spaces: from a view of elliptic orbits
- ABSTRACT In this talk, we call a special elliptic element an Spr-element, we create an equivalence relation on the set of Spr-elements of a real form of a complex simple Lie algebra, and we classify Spr-elements of each real form of all complex simple Lie algebras under our equivalence relation. Besides, we demonstrate that the classification of Spr-elements under our equivalence relation corresponds to that of simple irreducible pseudo-Hermitian symmetric Lie algebras under Berger's equivalence relation. In terms of the correspondence, we achieve the classification of simple irreducible pseudo-Hermitian symmetric Lie algebras without Berger's classification.