Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

DATE November 6 (Tue), 2007, 16:30–18:00

PLACE Room 126, Graduate School of Mathematical Sciences

SPEAKER **Masayasu Moriwaki (森脇政泰)** (Hiroshima University)

TITLE Multiplicity-free decompositions of the minimal representation of the indefinite orthogonal group

ABSTRACT A unitary representation of a reductive Lie group can decompose when restricted to a subgroup which is a symmetric pair with finite or infinite multiplicity. On the other hand, T. Kobayashi proved that an irreducible unitary highest weight representation of scalar type decomposes with multiplicity-free when restricted to any subgroup which is a semisimple symmetric pair, and R. Howe proved that the Weil representation decomposes with multiplicity-free when restricted to any subgroup which is a dual pair.

In this talk, with respect to the minimal representation of the indefinite orthogonal group which was constructed by Kazhdan, Kostant, Binegar–Zierau and Kobayashi–Ørsted, we will show that the multiplicity-free theorem holds when restricted to more subgroups than symmetric subgroups.