Lie Groups and Representation Theory Seminar
at the University of Tokyo

リー群論・表現論セミナー

DATE   May 10 (Tue), 2022, 17:00–18:00

PLACE   Online

SPEAKER **Kouichi Arashi (嵐 晃一)** (Nagoya University)

TITLE   Holomorphic multiplier representations over bounded homogeneous domains
有界等質領域上の正則乗数表現

ABSTRACT I will talk about unitarizations in the spaces of holomorphic sections of equivariant holomorphic line bundles over bounded homogeneous domains. We consider the identity components of algebraic groups acting transitively on the domains. The main part of this talk is a classification of such unitary representations.
We discuss an explicit description of the classification for a specific five-dimensional non-symmetric bounded homogeneous domain to illustrate the method of the classification (K. Arashi, "Holomorphic multiplier representations for bounded homogeneous domains", Journal of Lie Theory **30**, 1091–1116 (2020)).

有界等質領域に推移的に作用する代数群の単位元成分の, 同変正則直線束に対して, 正則切断の空間に実現されるユニタリ化を考える. 今回は主に, このようなユニタリ表現の分類法についてお話ししたい. 分類法を具体的に理解する為に, 五次元の特定の非対称有界等質領域に対する明示的な分類の記述も紹介しながら, 解説する (K. Arashi, "Holomorphic multiplier representations for bounded homogeneous domains", Journal of Lie Theory **30**, 1091–1116 (2020)).