

Lie Groups and Representation Theory Seminar at the University of Tokyo

リー群論・表現論セミナー

DATE June 13 (Tue), 2023, 17:00–18:00

PLACE Online

SPEAKER **Yoshiki Oshima** (大島芳樹) (The University of Tokyo)

TITLE Examples of discrete branching laws of derived functor modules
導来関手加群の離散分岐則の例

ABSTRACT We consider the restriction of Zuckerman's derived functor modules for symmetric pairs of real reductive groups assuming that it is discretely decomposable in the sense of Kobayashi. By using a classification result, it can be shown that the restriction decomposes as a direct sum of Zuckerman's derived functor modules for the subgroup. In the last talk, by using the realization of representations as D-modules, a decomposition of Zuckerman's modules corresponding to an orbit decomposition of flag varieties was explained. In this talk, we would like to see that such a decomposition can be written as a direct sum of Zuckerman's modules of the subgroup in some concrete examples.

実簡約 Lie 群の対称対に関する Zuckerman 導来関手加群の制限を考える．小林俊行氏によって導入された離散分解の仮定の下で，制限は部分群に対する Zuckerman 加群の直和に分解することが分類の結果を用いて示される．前回の講演では D 加群としての表現の実現を用いて旗多様体の軌道分解に対応した Zuckerman 加群の分解について説明した．今回はそのような分解が部分群の Zuckerman 加群の直和に書き換えられることを具体例に沿ってお話したい．