

東北大学大学院情報科学研究科
純粋・応用数学研究センター

第32回 幾何と解析セミナーのお知らせ

日 時： 2024年2月7日(水) 15:00 — 16:00
場 所： 東北大学大学院情報科学研究科棟 6階小講義室
講演者： 古谷 賢朗 氏 (大阪公立大学数学研究所)
題 目： Invariant integral lattices in pseudo H -type Lie algebras:
construction and classification

[概要] Pseudo H -type Lie algebras are a special class of 2-step nilpotent metric Lie algebras, intimately related to Clifford algebras $Cl_{r,s}$ and their modules.

In this talk, after overviewing the known properties of these algebras (existence of integral lattices, classification of algebras and determination of automorphism groups), I explain a scheme to construct and classify invariant orthogonal lattices in these algebras and show the explicit lattices for lower dimensional cases.

If time allows, as an application of this study I will explain some property of the spectral zeta function of the sub-Laplacian on the corresponding nil-manifolds.

Main part of this talk is a joint work with Irina Markina, professor at University of Bergen, Norway.

幾何と解析セミナー世話人：坂口茂，船野敬，高橋淳也

ホームページ：<http://www.math.is.tohoku.ac.jp/gaseminar/index.html>