

神楽坂解析セミナー(臨時)

講演者: Cornelia Mitsha Malanda

所属: Marien Ngouabi University (Republic of Congo)/東京理科大学

講演題目: Harmonic analysis on quasi Gelfand pairs

日時: 2022 年 6 月 30 日(木) 15:00~16:30

形式: ハイブリッド(東京理科大学神楽坂キャンパス3号館 333 教室 + Zoom)

アブストラクト:

*Let  $G$  be a locally compact group,  $K$  a compact subgroup  $\text{Aut}(G)$  of automorphism group of  $G$ . We designate by  $L^1_K(G)$  the Lie algebra of complex integrable  $K$ -biinvariant functions on  $G$ . The pair  $(G, K)$  is called quasi Gelfand pair of order  $p$  ( $p \in \mathbb{N}^+$ ) if  $L^1_K(G)$  is nilpotent of step  $p$ . When the step is equal to 1, we have the classical Gelfand pair with the zonal spherical functions. In this work we study firstly, this quasi Gelfand pair. Hence, secondly we study the quasi-spherical functions and the quasi-spherical Fourier transformation corresponding, and establish their relation with the quasi square integrable representation after studying some properties of these representations.*

*Keys words: Quasi Gelfand pair, quasi-spherical, quasi-square integrable and Character.*