

2025 年 11 月 7 日 (金) 中央大学幾何トポロジーセミナー

日時 : 2025 年 11 月 7 日 (金) 17:00—18:00

場所 : 中央大学後楽園キャンパス 6 号館 12 階 61225 室

講師 : Julie Rowlett (Chalmers University, Sweden)

**Title :** The  $L^p$  Laplace spectrum of conformally compact manifolds

**Abstract :** This talk is about joint work with Nelia Charalambous (Cyprus). Conformally compact manifolds are a class of non-compact manifolds with variable curvature that were introduced in their full generality by Fefferman and Graham to study conformal invariants. They are a broad class and include many physical examples like manifolds with Poincaré-Einstein metrics. Despite significant interest in these spaces, there is relatively little known about their Laplace spectra. Unlike some geometric settings in which the  $L^p$  Laplace spectrum is independent of  $p$ , we will see here that the  $L^p$  Laplace spectrum on a conformally compact manifold depends not only on  $p$  but also on the geometry of the manifold.