THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

On the PPW Conjecture for Hopf-Symmetric Sets in Non-compact Rank One Symmetric Spaces

by

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Abstract

Comparison results on eigenvalues of Laplace Operators are important and interesting topics in spectral geometry. In the 1990s Asbaugh and Benguria proved the Payne-Pólya-Weinberger (PPW) inequality, which says balls maximize the ratio of the first two Dirichlet eigenvalues of a bounded domain in Rn. A reformulated version has been proved in the hemisphere and also hyperbolic space. Recently we generalize the PPW inequality to Hopf symmetric sets in non-compact rank one symmetric spaces.

Date   : **28 July 2025 (Monday)**
Time   : **4:00p.m.-5:00p.m.**
Venue : **Room 4504 (Lift 25/26)**

All are Welcome!