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## Explicit eigenfunctions of the Laplacian on compact symmetric spaces

## Abstract

Roughly speaking, a "topological volume" is a real valued invariant of closed manifolds which encodes both the topological properties of manifolds and the information of their Riemannian volume. Examples of such invariants are Euler characteristic, simplicial volume and minimal volume entropy. In this talk, we will discuss some vanishing results of the previous invariants in terms of "special" open covers and we connect these results to a celebrated question by Gromov. These results are part of some joint works with Pietro Capovilla, Roberto Frigerio and Clara Löh.