

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Two results related to isospectral geometry

Professor Sai-Kee Yeung
Purdue University, USA

Abstract

The usual Isospectral problem asks whether two Riemannian manifolds with the same spectrum with respect to the Laplace Beltrami operators have to be isometric. The answer is in general no due to the work of Milnor, Sunada, Gordon-Webb-Wolpert and many others. In this talk we introduce some related problems in the same general direction and present two results. The first result is to give answers to some problems left open by Prasad and Rapinchuk in their interesting study of isospectral problems on locally symmetric spaces. The second result is a joint work with Der-Chen Chang on the isospectral problem with respect to a subelliptic Laplacian in CR setting.

Date: July 21, 2009 (Tuesday)

Time: 4:00 - 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome