



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

Isolated singularity of the Yamabe equation

Prof. Jingang Xiong
Beijing Normal University

Abstract

In 1989, Caffarelli-Gidas-Spruck proved that solutions of the Yamabe equation near each isolated singular point must approach to a radial Fowler (or Delaunay) solution, when the background metric is conformally flat. An alternative proof and refinement of the asymptotics were provided by Korevaar-Mazzeo-Pacard-Schoen 1999. When the background metric is not conformally flat, Marques 2008 obtained the same conclusion in dimensions 3, 4, 5. In this talk, I will show our results in dimension 6, and in the case when background metric is asymptotically flat.

Date: 16 February 2024 (Friday)

Time: 2:00pm - 3:00pm

Venue: Room 3472 (Lifts 25/26)

All are Welcome!