

PolyU-PDE Seminars

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Topic 1

Optimal Liouville theorems for conformally invariant PDEs

Date | Time

22 March 2024 (Friday) | 4:00pm – 5:00pm (HK Time)

Venue:

HJ302, Main Campus

Abstract:

In this talk, we discuss optimal conditions for Liouville theorems in the class of conformally invariant fully nonlinear elliptic PDEs. Besides the theoretical interests, these equations, known as "fully nonlinear versions of Yamabe equations", find their applications in studying conformal metrics on Riemannian manifolds. Based on recent joint works with Baozhi Chu and Yanyan Li (Rutgers, USA).

Topic 2

Unique continuation properties of boundary value problems

Date | Time

5 April 2024 (Friday) | 4:00pm – 5:00pm (HK Time)

Venue:

Y304, Main Campus

Abstract:

In this talk, we discuss some recent progress on boundary unique continuation properties for linear elliptic equations. We focus on minimum smooth requirements on the boundaries or coefficients of Dirichlet, Neumann and Robin boundary value problems. Some future directions will also be introduced. Partly based on a recent joint work with Dennis Kriventsov (Rutgers, USA).

ALL ARE WELCOME