



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

**Classical arguments and their limitations in conformal
geometry**

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Abstract

We consider the classical conformally prescribed scalar curvature problem on a closed Riemannian manifold. In the most generic and simple situations we review the relevant formulations, strategies and arguments to show solvability, in particular exhibiting some recent existence results. Complementarily we will see, that the theory as of today is far from being complete, as in most situations and for generic curvature candidate functions the underlying equation has trivial degree, but is solvable, while only a few obstructions are explicitly known.

Date: 11 April 2024 (Thursday)

Time: 4:00pm

Zoom Meeting: <https://hkust.zoom.us/j/94299656235> (Passcode: 154986)

All are Welcome!