



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

**On degenerate blow-up profiles for the semilinear
heat equation**

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Abstract

In this talk, we consider together with Hatem Zaag the semilinear heat equation with a superlinear power nonlinearity in the Sobolev subcritical range. We construct a solution which blows up in finite time only at the origin, with a completely new blow-up profile, which is cross-shaped and natural extension of this result.

Date: 14 November 2024 (Thursday)

Time: 4:00pm

Zoom Meeting: <https://hkust.zoom.us/j/93283549312> (Passcode: 860254)

All are Welcome!