THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PDE

The anisotropic Bernstein problem

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Abstract

The Bernstein problem asks whether entire minimal graphs in R^{n+1} are necessarily hyperplanes. It is known through spectacular work of Bernstein, Fleming, De Giorgi, Almgren, Simons, and Bombieri-De Giorgi-Giusti that the answer is positive if and only if $n < 8$. The anisotropic Bernstein problem asks the same question about minimizers of parametric elliptic functionals, which are natural generalizations of the area functional that both arise in many applications and offer important technical challenges. We will discuss the recent solution of this problem (the answer is positive if and only if $n < 4$). This is joint work with Y. Yang.

Date: 10 March 2023 (Friday)

Time: 9:00am

Zoom Meeting: https://hkust.zoom.us/j/95339343887 (Passcode: 232558)

All are Welcome!