



The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on PDE

Elliptic equations from composite materials

By

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Abstract

I will present an interior Schauder estimate for a divergence form elliptic equation on the plane, where the coefficients and data are piecewise Holder continuous in a domain containing two touching balls as subdomains. This completely answers a question raised by Li and Vogelius in dimension 2. I will also discuss an optimal gradient estimates for the conductivity problem, which gives the explicit dependence of the degeneracy of the coefficients and the distance between interfacial boundaries of inclusions. Based on joint work with Hong Zhang and Hangang Li.

Date : Monday, 7 August 2017

Time: 11:00 a.m. – 12:00 p.m.

***Venue: Room 3472, Academic Building
(near Lifts 25&26), HKUST***

All are welcome!