The Hong Kong University of Science and Technology

Department of Mathematics

<u>Seminar on Applied Mathematics</u>

A functional approach to some eigenvalue problems associated with incompressible flow

by

Prof Yuan LOU
Ohio State University

Abstract

We propose certain functional associated with the principal eigenfunctions of some elliptic operator with incompressible flow and its adjoint operator. The functional can be applied to establish the monotonicity of the principal eigenvalue, as a function of the advection amplitude, for the operator subject to Dirichlet, Robin and Neumann boundary conditions. Other applications of this functional will also be discussed.

Date: **Friday, 7 December 2018**
Time: **10:00a.m. – 11:00a.m.**
Venue: **Room 4472, Academic Building, (Lifts 25, 26), HKUST**

All are welcome!