

## **Department of Mathematics** The Chinese University of Hong Kong



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## A Posteriori Error Estimation Based on Primal-Dual Formulations

## **Professor Shun Zhang** Department of Mathematics City University of Hong Kong

**Abstract:** Recently, based on the Prage-Synge identity, a posteriori error estimator for finite element approximations to the diffusion equation has been developed with the reliability constant to be one. In this talk, I will talk about its generalization: error estimation based on the gap between approximations of primal and dual problems and the localization of these estimators. Generalization of the idea to the a posteriori error estimation of the reduced basis method will also be discussed.

Date: 19 January 2017 (Thursday)
Time: 3:00 p.m. – 4:00 p.m.
Venue: G35, Lady Shaw Building, The Chinese University of Hong Kong, Shatin

All are Welcome!