



### The Hong Kong Polytechnic University **Department of Applied Mathematics**

## Colloquium

# An adaptive edge element method for a quasilinear H(curl)-elliptic problem

By

### **Prof. Yifeng XU Shanghai Normal University**

#### Abstract

In this talk, I shall introduce an adaptive edge element method for a quasilinear H(curl)-elliptic problem in magnetostatics, based on a residual-type a posteriori error estimator and general marking strategies. The error estimator is shown to be reliable and efficient, and its resulting sequence of adaptively generated solutions converges strongly to the exact solution of the original quasilinear system. Numerical experiments are provided to verify the validity of the theoretical results. This is a joint work with Prof. Irwin Yousept (U. Duisburg-Essen) and Prof. Jun Zou (CUHK).



**Click to join** 

Date: 14 April 2022 (Thursday) Time: 15:00-16:00 (Hong Kong Standard Time GMT +8) Venue: Online Talk via Zoom (Meeting ID: 945 7661 1317) Speaker: Prof. Yifeng Xu, Shanghai Normal University Host: Dr. Buyang Li, The Hong Kong Polytechnic University Click to join:

https://polyu.zoom.us/j/94576611317?pwd=SHBLSTRzTlpuTFM5Q0FKOWNwcS9wdz09

\* \* \* \* \* \* **ALL ARE WELCOME** For enrolment, please send your name and email to wai-yan.moon@polyu.edu.hk on or before 13 April 2022