

**Institute for Mathematics and its Applications**  
**2012 Colloquium Series**  
University of Wollongong

**Title:** Mathematical analysis for fractional diffusion equations: modeling, forward problems and inverse problems

**Speaker:** Xiang Xu (Michigan State University)

**Time and Date:** 3:30pm, Friday 23 November 2012

**Location:** Room 24.103

**Abstract:** Time-fractional diffusion equations are of practical interest and importance, since they well describe the power law decay for the diffusion in porous media. In this talk, recent progresses on time-fractional diffusion equations are discussed, especially on some typical inverse problems, including backward problem, inverse source problem, inverse boundary problem, inverse coefficient problem etc.