Hongjie Dong
Brown University
will speak on

**Elliptic and parabolic equations in convex polytopes with discontinuous coefficients**

ABSTRACT: I will present some recent results on the $W^2_p$-estimate for the boundary value problem of second-order elliptic and parabolic equations in simple convex polytopes with irregular coefficients. Equations with discontinuous coefficients in non-smooth domains emerge from problems in mechanics, engineering, and biology, to name a few. Part of the talk is based on joint work with Doyoon Kim.

**Monday, May 6, 2013**
**Lecture at 4:00 PM**
**Coffee, tea, and refreshments from 3:40 PM**
**Room 617, Wachman Hall**
**Department of Mathematics**