COLLOQUIUM

UNIVERSITY OF PITTSBURGH

FRIDAY, MARCH 18, 2016

704 THACKERAY HALL

3:30 P.M.

QING LIU

DEPARTMENT OF APPLIED MATHEMATICS
FUKUOKA UNIVERSITY

DISCRETE GAME THEORY AND
NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS

ABSTRACT: In this talk, we will discuss game-theoretic approaches to various partial differential equations. We first describe the connection between discrete games and nonlinear equations involving the mean curvature operator and p-Laplace operators, with several recent developments. We then discuss applications of these game interpretations, especially to the study of convexity preserving properties for nonlinear parabolic equations.

Refreshments served at 3:00 p.m.
in the Math Dept. COMMON ROOM, Thackeray 705