

DEPARTMENT OF MATHEMATICS & STATISTICS COLLOQUIUM

Speaker: Dr. Gerard Awanou, University of Illinois at Chicago

Title: Discrete Aleksandrov solutions of the Monge-Ampere

equation

Date: Friday, February 3, 2017

Room/Time: Meet -n-Greet: 2:30 p.m. Room 222 MM

Talk: 3:00 p.m. Room 271 MM

Host: Dr. Sara Pollock

ABSTRACT:

The Monge-Ampere equation is a nonlinear partial differential equation which appears in a wide range of applications, e.g. geometric optics and material sciences. We present convergence results for a finite difference discretization to its weak solution in the sense of Aleksandrov.

SPEAKER BIO:

Dr. Awanou is a professor in the department of Mathematics, Statistics, and Computer Science at the University of Illinois at Chicago. He received my Ph.D. in Mathematics in 2003 from the University of Georgia and spent two years as a postdoctoral associate at the Institute for Mathematics and its Applications, University of Minnesota. He then worked at Northern Illinois University for seven years before coming to UIC in 2012. His research interests are primarily in the numerical analysis of partial differential equations. In 2009, he was awarded a Sloan fellowship.