



The
Department of Mathematics
at the University of Toronto

Presents

The 17th Annual R.A. Blyth Lectures in Mathematics



Professor Daniel Spielman
(Yale University)

Laplacian Matrices of Graphs Applications, Computations, and Approximations

I will explain why the Laplacian matrices of graphs are so interesting, how one solves systems of linear equations in these matrices, and how these lead to a notion of what it means for one graph to approximate another.

There will be three lectures and each one will be self-contained, although they go best together.

Further information and detailed abstracts for each lecture can be found at:
<http://www.math.toronto.edu/cms/blyth-lecture-series>

Lecture 1: Spectral and Electrical Graph Theory
Wednesday, September 28, 2011 @ 3:30pm

Lecture 2: Solving Systems of Linear Equations in Graph Laplacians
Thursday, September 29, 2011 @ 3:30pm

Lecture 3: Sparsification of Graphs and Approximation of Matrices
Friday, September 30, 2011 @ 3:30pm

All Lectures will take place in the Bahen Centre in Room BA1130

A Reception will follow Lecture 1 in the
Mathematics Lounge, 6th floor, Bahen Centre
Food and Beverages will be Provided
All are Welcome