RYERSON UNIVERSITY
DEPARTMENT OF MATHEMATICS
GRAPHS AT RYERSON (G@R) SEMINAR

Abbas Mehrabian

Department of Combinatorics and Optimization, University of Waterloo

Date: Wednesday, November 28, 2012

Time: 1:15 pm

Location: ENG 210

Random Apollonian Networks

Abstract: Start with a triangle embedded in the plane. In each step, choose a bounded face uniformly at random, add a vertex inside that face and join it to the vertices on the face. After $n-3$ steps, you will have a (random) triangulated plane graph with n vertices. This is called a Random Apollonian Network (RAN) and we study its asymptotic properties, as its number of vertices goes to infinity. Specifically, we analyze the length of the longest path and the diameter of a typical RAN.

Joint work with Ehsan Ebrahimzadeh, Linda Farczadi, Jane Gao, Cristiane Sato, Nick Wormald, and Jonathan Zung.

All Faculty, staff, students and guests are welcome to attend