

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

Dr. Jason Brown

Department of Mathematics and Statistics, Dalhousie University

Date: Friday, March 23, 2018

Time: 3pm

Location: ENG 210

Node Reliability of Graphs

Abstract:

A number of well-known probabilistic models for network robustness (such as two-terminal, K-terminal and all-terminal reliabilities) have been thoroughly investigated. However, models where the vertices, rather than the edges fail, has received much less attention. In this talk we will explore node reliability, the probability that, given each vertex is independently operational with probability p , that the operational vertices induce a nonempty connected subgraph. We will see that the behaviour of node reliability functions is surprisingly quite different from its edge-related cousins.

ALL FACULTY, STAFF, STUDENTS AND GUESTS ARE WELCOME TO ATTEND