

**RYERSON UNIVERSITY  
DEPARTMENT OF MATHEMATICS  
BIOMATHEMATICS & FLUIDS SEMINAR**

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Date: Thursday, October 31, 2013

Time: 11:10 am

Location: ENG 210

**One dimensional diffusive logistic population  
models with harvesting rates**

**Abstract:**

This presentation is based on my recent work on one-dimensional diffusive logistic population models with harvesting rates. I shall derive a one-dimensional diffusive logistic population model with a constant harvesting rate under the assumptions that a population inhabits a patch of dimensionless width and no members of the population can survive outside of the patch. I'll tackle the essential problem: determining the size of the patch and the ranges of harvesting rates under which the population survives or becomes extinct. A conjecture will be given.

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