

McMASTER UNIVERSITY  
GRADUATE PROGRAM IN STATISTICS

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**STATISTICS SEMINAR**

- Speaker:** Dr. Sri Gopal Mohanty  
Department of Mathematics and Statistics  
McMaster University
- Title:** Transient Behaviour of Batch Queues: A Combinatorial Approach  
**Day:** Tuesday, October 16, 2007
- Time:** 3:30 - 4:30 PM
- Place:** HH/217 - Deloitte Colloquium Room  
(refreshments in HH/216 at 3:00 PM)

**SUMMARY**

The study of transient behaviour of a queueing system has remained a challenge. Except for the simplest model  $M/M/1$ , the determination of transient probability function for other models has not been researched until eighties. We consider transient probability functions of queues with either batch arrivals or batch departures and derive them by lattice path combinatorics via randomization and duality.

## ABOUT THE SPEAKER

Sri Gopal Mohanty received his B.A. from Utkal University, his M.A. from Panjab University, and his Ph.D. from the University of Alberta. He joined the faculty at McMaster University in 1964 and is now Professor Emeritus of Mathematics and Statistics. His research interests include Combinatorics in Probability and Statistics, Random Walks, Discrete Distributions, Theory of Queues. In 1979 he published the book *Lattice Path Counting and Applications* and in 2007 he co-authored another book, *A Course on Queueing Models* with J. L. Jain and W. Böhm.

## MORE SEMINAR INFORMATION

A list of recent and upcoming seminars is available at  
<http://www.math.mcmaster.ca/canty/seminars>

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