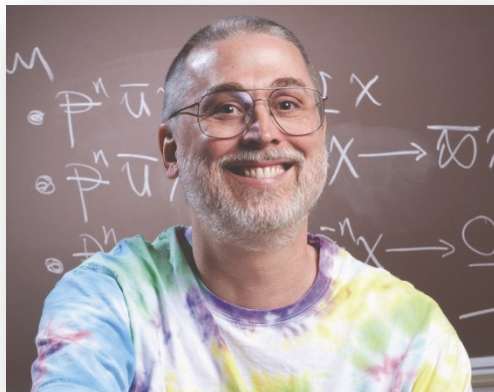


## Number Theory and Combinatorics Seminar



Wednesday, November 30, 2011

Room: E575

Time: 12:00 - 12:50pm

**Speaker:** Dave Morris (University of Lethbridge)

**Title:** Hamiltonian Checkerboards

**Abstract:** Place a checker on some square of an  $m$ -by- $n$  rectangular checkerboard. Asking whether the checker can tour the board, visiting all of the squares without repeats, is the same as asking whether a certain graph has a hamiltonian path (or hamiltonian cycle). The question becomes more interesting if we allow the checker to step off the edge of the board. This modification leads to numerous open problems, and also to connections with ideas from elementary topology and group theory. Some of the problems may be easy, but many have resisted attack for 30 years. No advanced mathematical training will be needed to understand most of this talk.

**EVERYONE IS WELCOME!**

Visit the seminar page at <http://www.cs.uleth.ca/~nathanng/ntcoseminar.html>