## **Graduate Seminar in** Mathematics

Naren Kumar. G Memorial University

Thursday, December 4, 2014 1:00-2:00 p.m., HH-3017

## Analysis of key predistribution schemes in wireless sensor networks

## Abstract:

Combinatorial designs are useful for designing key predistribution schemes that are applied to wireless sensor networks. This helps in building a secure channel. Privatekey cryptography helps to determine a common key between a pair of nodes in sensor networks. Wireless sensor networks using key predistribution schemes have many useful applications in military and civil operations. When designs are efficiently implemented on sensor networks, blocks with unique keys will be the result. One such implementation is a transversal design which follows the principle of simple key establishment. Analysis of designs and modeling the key schemes is the subject of this project.