

# Lethbridge Number Theory and Combinatorics Seminar

Friday — May 8, 2015

Room: **C640**

Time: **10:30 to 11:20 a.m.**

Note special  
day, time,  
and place!

**Ram Murty**  
(Queen's University)

## Consecutive squarefull numbers

*Abstract:* A number  $n$  is called squarefull if for every prime  $p$  dividing  $n$ , we have  $p^2$  also dividing  $n$ . Erdos conjectured that the number of pairs of consecutive squarefull numbers  $(n, n+1)$  with  $n < N$  is at most  $(\log N)^A$  for some  $A > 0$ . This conjecture is still open. We will show that the abc conjecture implies this number is at most  $N^e$  for any  $e > 0$ . We will also discuss a related conjecture of Ankeny, Artin and Chowla on fundamental units of certain real quadratic fields and discuss its connection with the Erdos conjecture. This is joint work with Kevser Aktas.

**EVERYONE IS WELCOME!**

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



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