Lethbridge Number Theory and Combinatorics Seminar

Monday — November 4, 2013
Room: B660
Time: 12:00 to 12:50 p.m.

Soroosh Yazdani
(University of Lethbridge)

Solving S-unit equations

Abstract: Let S be a finite collection of prime numbers. We say a number is an S-unit if it is a product of powers of primes in S. For instance $-3/8$ is an example of a $\{2,3\}$-unit. Many interesting Diophantine equations are reduced to solving equations of the form

$$x + y = 1$$

with x and y both being an S-unit. Using linear forms of logarithms, we can show that there only finitely many solutions to these S-unit equations. In this talk, I will explain an algorithm (due primarily to Smart and Wildanger) on how we can actually enumerate all these solutions.

EVERYONE IS WELCOME!

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

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