Lethbridge Number Theory and Combinatorics Seminar

Monday — March 21, 2016
Room: C630
Time: 12:00 to 12:50 p.m.

Arnab Bose

Investigations on some Exponential Congruences

Abstract: Around 1981, Selfridge asked for what positive integers a and b does $2^a - 2^b$ divide $n^a - n^b$ for all $n \in \mathbb{N}$. The problem was independently solved by various people in different contexts. In this talk, we study their ideas and prove a generalization of the problem, in the elementary number theoretic sense and also in algebraic number fields. Further, we develop ideas to give a conditional resolution and generalizations to another problem by H.Ruderman which is closely related to Selfridge's problem.

EVERYONE IS WELCOME!

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

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