Department of Mathematics, Statistics and Computer Science
St. Francis Xavier University
presents

A First Look at Computer Algebra and Symbolic Polynomials

by
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Tuesday, August 7th, 2007 @ 2:15pm in NHB26

Abstract:
Computer Algebra studies the implementation of exact mathematical computations. Through demonstrations, we will examine the most important and interesting subjects pertaining to symbolic computation. This includes Karatsuba's Trick, modular algorithms, change of basis, Fast Fourier Transform and Kroenecker Substitution.

We will conclude with a brief introduction to the problem of symbolic polynomials, polynomials whose exponents contain parameters. We have families of algorithms that operate on this rich mathematical object which make use of several of the aforementioned elementary computer algebra topics.

Refreshments will be served before the talk in AX24A