

## APPLIED MATHEMATICS COLLOQUIUM

Date: Friday, October 23, 2015

Time: 2:00 – 3:00 p.m.

Location: Middlesex College Room 260

### **What Is Hybrid Symbolic-Numeric Computation?**

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#### **Abstract:**

In my talk, I will characterize the hybrid methodology by surveying some important results and the lessons I have learned from them. Those include the notion of approximate GCD, approximate sparse interpolant and the notion of ill-posedness ("unstably boundedness") polynomial inequalities, and the analysis of the random distributions of matrix condition numbers in randomized hybrid algorithms.

This work is in collaboration with Wen-shin Lee, Zhengfeng Yang, and Lihong Zhi.