

VCU Discrete Mathematics Seminar

New Experiments in Automated Conjecture-making

**Prof Craig Larson
VCU!**

Tuesday, November 11
12:30–1:20
4119 Harris Hall

It is now possible for a computer to generate conjectures that are designed to address or advance specific mathematical questions. Computers are already of fundamental utility in many areas of mathematics—and they will soon assist mathematicians in ways that many have believed to require human intelligence.

We have developed a program, based on a heuristic of Fajtlowicz, that can be used to make invariant-relation or property-relation conjectures for any kind of mathematical object. We will explain how the program works; and illustrate the use of the program mainly in graph theory research—some number theory, matrix theory, game theory, and linear programming conjectures will also be presented.

This is joint work with Nico Van Cleemput (Ghent University).



For more information on our fall schedule, see:
<http://www.people.vcu.edu/~dcranston/DM-seminar/>