

VCU Discrete Mathematics Seminar

Automated Conjecturing for Proof Discovery

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VCU Math!

Wednesday, Oct. 19
1:00-1:50
4145 Harris Hall

CONJECTURING is an open-source Sage program which can be used to make invariant-relation or property-relation conjectures for any mathematical object-type. The user must provide at least a few object examples, together with functions defining invariants and properties for that object-type. These invariants and properties will then appear in the conjectures. Here we demonstrate how the CONJECTURING program can be used to produce proof sketches in graph theory.

We use the *Friendship Theorem* as our example in this talk. This is joint work with Nico Van Cleemput (Ghent University).



For the Fall 2016 DM seminar schedule, see:

<http://www.people.vcu.edu/~clarson/discrete-seminar-fall-2016.html>