

# VCU Discrete Mathematics Seminar

## *Structure generation: A case study*

**Nico Van Cleemput**  
**University of West Bohemia**  
**(Czech Republic)**

Tuesday, September 9  
12:30–1:20  
4119 Harris Hall

With structure generation we mean the design, the implementation and the execution of an algorithm to construct objects from a given class. Structure generation has many uses: checking conjectures, building intuition, looking for specific structures, ...

In this talk we will give an introduction to exhaustive and isomorph-free structure generation. We will discuss the common techniques, the problems that arise, the results that need to be proven and the results that can speed up the actual implementation. All this will be explained using the generation of generalised cubic graphs as an example.



This is the first talk of the Fall 2014 seminar! For more information on our fall schedule, see: <http://www.people.vcu.edu/~dcranston/DM-seminar/>