

Department of Mathematics and Statistics

# COLLOQUIUM

The Dresden Memorial Lectures

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**MONDAY, DECEMBER 7th**  
**Patterns and Disorder**

What does it mean for a mathematical object to be ordered? To be disordered?  
If we look at a set of numbers that is large in some sense, does it have to contain any patterns?  
How small can we make such a set, but still have it contain interesting configurations?  
We explore different notions of patterned and random sets, starting with ancient ideas and ending with still unsolved problems.

**TUESDAY, DECEMBER 8th**  
**Periodicity and Complexity**

Symbolic dynamics is a way to study general dynamical systems, by coding iterates of points with some alphabet. While this setting is quite general, sometimes one can make global statements about the system using only local information. We will discuss a relation of this form, and then quickly arrive at current research and open questions on related problems.

**SCIENCE CENTER 199**

**Refreshments 4:15**

**Talks 4:30**