



Speaker: Lara Pudwell
Valparaiso University

Tuesday, November 27, 2012
1:00 PM
117 Hayes-Healy Hall

Title: Pattern Avoidance in Trees

Abstract:

Pattern-avoiding trees have appeared in various computational contexts since at least the 1980s. A more recent topic of interest is the exact enumeration of trees that avoid some other tree pattern. In 2010, Rowland considered this enumeration problem for rooted, ordered binary trees where tree T contains tree pattern t if and only if T contains t as a contiguous rooted, ordered subtree. In this talk we consider Rowland's contiguous tree patterns and a generalization to non-contiguous tree patterns. In both cases we will enumerate trees with no copies of a given tree. We conclude with implications of these tree results for pattern-avoiding permutations.