Derek Levin, Peter Nugent and Lara Pudwell* (lara.pudwell@valpo.edu), Department of Mathematics and Statistics, 1900 Chapel Drive, Valparaiso, IN 46383, and Manda Riehl and ML Tlachac. Pattern-avoiding forests. Preliminary report.
A heap is a rooted, ordered tree with integer-labeled vertices such that each child has a larger label than its parent. We associate a permutation to a heap by reading the labels from left to right by levels, starting with the root. A forest is an ordered collection of heaps where all vertices in the forest have distinct labels. We associate a permutation to a forest by reading the permutation associated to each heap and then concatenating. In this talk, we consider forests whose associated permutation avoids a single pattern of length 3. In particular, we highlight connections between pattern-avoiding forests and restricted lattice paths. (Received December 29, 2014)

