1135-05-597 Lara Pudwell* (lara.pudwell@valpo.edu), Department of Mathematics and Statistics, 1900 Chapel Drive, Valparaiso, IN 46383. Patterns in trees.

One interesting enumeration problem in combinatorics asks how many trees T contain a prescribed smaller tree t. During the summers of 2010, 2011, and 2012, my teams of REU students studied this question for specific families of trees using two different definitions of what it means for one tree to contain another tree. In this talk, I'll discuss what we know about this problem and describe other variations that are open for exploration. (Received September 09, 2017)