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Kara B Greenfield* (kgreenfield@wpi.edu). *Fixing Numbers of Trees.*

The fixing number of a graph, G , is the smallest number, k , such that there is a set of k vertices in $V(G)$, such that assigning a unique label to each of those k vertices removes all but the trivial automorphism. While most general graphs have fixing number 0, most trees have larger fixing numbers, making them a very interesting type of graph to study in this context. We will discuss the efficient computation of the fixing numbers of trees and of specific types of trees, particularly examining the computational advantages that can be gained because of the prior knowledge of the graph type. Additionally, we will examine the distribution of fixing numbers of general trees, homeomorphically irreducible trees, and rooted trees. (Received February 10, 2011)