

1064-05-233

Andrew J Radcliffe* (aradcliffe1@math.unl.edu), Department of Mathematics, 205 Avery Hall, University of Nebraska-Lincoln, Lincoln, NE 68502, and **Andrew Ray**, University of Nebraska-Lincoln. *Extremal Trees for Homomorphism Enumeration.*

For a certain class of image graphs H , we determine the trees with fixed size and maximum degree having the largest number of homomorphisms into H . Our proof technique also allows us to determine extremal trees for a range of other enumeration problems on the same class of trees. One class of extremal trees is somewhat unexpected, and deserves to be better known. These are the festoons. We give a new, and more tractable characterization of festoons. (Received September 10, 2010)