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**Catherine Yan\*** (cyan@math.tamu.edu), **Ron Graham** (graham@ucsd.edu) and **Steve Butler** (butler@iastate.edu). *Parking Distributions on Trees*. Preliminary report.

We consider a generalization of parking functions to parking distributions on trees and study the unordered version and a  $q$ -analogue. We give an efficient way to form generating functions to compute these values and establish the positivity and log-concavity of a related polynomial, which relies on the structure of the underlying trees. We also connect the unordered parking distributions on caterpillars (trees whose removal of leaves results in a path) to restricted lattice walks. (Received July 01, 2017)