
MARIE-LOUISE BRUNER, Vienna University of Technology, Austria

Parking in trees

We generalize the intensively studied concept of parking functions to trees. This leads to the following setting: Given a rooted unordered tree with n nodes, m drivers try to park at their specific preferred parking spot. If this node is already occupied, the driver moves on to the next node lying closer to the root. How many assignments of preferred parking spots are there that allow all drivers to park successfully? We answer this question both with exact and asymptotic enumeration results and further generalize this concept to mappings.

This is joint work with Alois Panholzer.