

Pak-Stanley labeling of the Ish arrangement

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Abstract

The original Pak-Stanley labeling is a bijection from the set of regions of the Shi arrangement to the set of parking functions. This correspondence can be extended to other hyperplane arrangements, but not always in a bijective way. In this talk we show that the Pak-Stanley labeling of the Ish arrangement is bijective, characterize its labels, and present an algorithm that corresponds to its inverse. We also characterize the labels of the relatively bounded regions of the Ish arrangement. This work is joint work with António Guedes de Oliveira.