

Seminar 2021/2022

Pak-Stanley labeling of hyperplane arrangements

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<https://videoconf-colibri.zoom.us/j/86389857315>

In the nineties Pak and Stanley introduced a construction in which every region of the m -Shi arrangement of hyperplanes is labeled with a m -parking function. In this talk we consider the same construction applied to the regions of the m -Catalan arrangement and to the regions of the Ish arrangement. We characterize the Pak-Stanley labels of the regions and of the relatively bounded regions of these arrangements. Finally, we present an algorithm for the inverse.

This is joint work with António Guedes de Oliveira.