

## Institut für Geometrie

## Geometrie-Seminar

Thu Jan 11, 2024, 8:30-9:30

Seminarraum 2 Geometrie, Kopernikusgasse 24/IV, TU Graz

## The s-weak order and s-Permutahedron

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The weak order on permutations and permutahedron are classical objects at the intersection of combinatorics and discrete geometry. Their deep and interesting connections with the associahedron and the Tamari lattice on binary trees have been an active subject of research. We present a generalization of the weak order, the s-weak order on so-called s-decreasing trees and their geometrical counter part the s-Permutahedron with a possible realization as polytopal complex.

Cesar Ceballos