

Institut für Geometrie

Geometry Seminar

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Topology of political structures and voting games modeled by simplicial complexes

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Simplicial complexes are a natural tool for modeling structures in which there exist interactions between objects, such as political structures and voting games. The geometrical realizations of these simplicial complexes are topological spaces whose properties, for example homology, give us something about the modeled structures. We will talk about power indices, as well as concepts such as: stability of political structure, merging, mediator, delegation, compromise...

Michael Kerber, Johannes Wallner