

Abstract Polytopes and Their Symmetry

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Abstract The theory of abstract polytopes, particularly of those with a high degree of symmetry, involves a fascinating mixture of geometry, combinatorics and algebra. Their theory is patterned after the classical theory of convex polyhedra and polytopes but deals with structures that are generally more complex. The lecture gives an introduction into abstract polytope theory, beginning with a review of convex polytope theory and focusing on symmetry as a unifying scheme.