1127-05-302Michelle Delcourt* (delcour2@illinois.edu), 1409 W Green St., Champaign, IL 61801.Intersecting Families of Permutations.

Enumerating families of combinatorial objects with given properties and describing the typical structure of these objects are fundamental problems in extremal combinatorics. In this talk, we will investigate intersecting families of discrete structures in various settings, determining their typical structure as the size of the underlying ground set tends to infinity. Our new approach outlines a general framework for a number of similar problems; in particular, we prove analogous results for hypergraphs, permutations, and vector spaces using the same technique. This is joint work with Jozsef Balogh, Shagnik Das, Hong Liu, and Maryam Sharifzadeh. (Received February 06, 2017)