1151-52-193 **Pablo Soberón***, One Bernard Baruch Way, New York, NY 10010. *Probabilistic Methods for the colorful Tverberg theorem.*

Tverberg's theorem determines the number of points in R^d needed to guarantee the existence of a partition of them into r parts such that the convex hulls of the parts intersect. Recently, probabilistic arguments have been used to obtain variations which resist the removal of small sets of points (so-called "versions with tolerance"). In this talk, we revisit how those methods relate to the colorful variations of Tverberg's theorem and emphasize the results that may be extended to oriented matroids. (Received August 18, 2019)