Alan Chang, Marianna Csornyei* (csornyei@math.uchicago.edu), Kornelia Hera and Tamas Keleti. Small unions of affine subspaces and skeletons via Baire category.

Our aim is to find the minimal Hausdorff dimension of the union of scaled and/or rotated copies of the k-skeleton of a fixed polytope centered at the points of a given set. For many of these problems, we show that a typical arrangement in the sense of Baire category gives minimal Hausdorff dimension. (Received February 20, 2018)