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**Pak**, **Igor** [**Pak**, **I**. **M**.] (1-YALE)

When and how n choose k. (English. English summary)

Randomization methods in algorithm design (Princeton, NJ, 1997), 191–238, DIMACS Ser. Discrete Math. Theoret. Comput. Sci., 43, Amer. Math. Soc., Providence, RI, 1999.

This is a survey paper on choosing permutations and k-subsets of an n-set, and flags and k-dimensional subspaces of an n-dimensional vector space over some finite field. Most of the material presented is well known, however, the focus on the connections between combinatorics, algebra, probability theory and computer science that show up in this context makes very interesting reading. The exposition is self-contained and gives many references for further reading.

{For the entire collection see MR 99f:68007.}

Markus E. Fulmek (A-WIEN)