On randomly generated non-trivially intersecting hypergraphs

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Abstract

We propose two procedures to choose members of \( \binom{[n]}{r} \) sequentially at random to form a non-trivially intersecting hypergraph. In both cases we show what is the limiting probability that if \( r = c_n n^{1/3} \) with \( c_n \to c \), that the process results a Hilton-Milner-type hypergraph.