
JINYOUNG PARK, Institute for Advanced Study

On a problem of M. Talagrand

We will discuss some special cases of a conjecture of M. Talagrand relating two notions of “threshold” for an increasing family F of subsets of a finite set X . The full conjecture implies equivalence of the “Fractional ExpectationThreshold Conjecture,” due to Talagrand and recently proved by Frankston, Kahn, Narayanan, and myself, and the (stronger) “Expectation-Threshold Conjecture” of Kahn and Kalai.

Talagrand showed that his conjecture is true in some special cases and suggested a couple of more challenging test cases. In the talk, I will give more detailed descriptions of this problem, and some proof ideas if time allows.

This is joint work with Keith Frankston and Jeff Kahn.