

DISCRETE MATH
SEMINAR

Thresholds

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Abstract: Thresholds for increasing properties of random structures are a central concern in probabilistic combinatorics and related areas. In 2006, Kahn and Kalai conjectured that for any nontrivial increasing property on a finite set, its threshold is never far from its "expectation-threshold," which is a natural (and often easy to calculate) lower bound on the threshold. In this talk, I will first introduce the Kahn-Kalai Conjecture with some motivating examples and then talk about the recent resolution of a fractional version of the Kahn-Kalai Conjecture due to Frankston, Kahn, Narayanan, and myself. Some follow-up work, along with open questions, will also be discussed.

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Online

MATHEMATICS
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