Combinatorics Seminar

One trick with two applications

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Abstract: We discuss a recent key lemma of Alweiss, Lovett, Wu and Zhang which led to big improvement for the Erdos-Rado sunflower problem. Essentially the same lemma was also crucial in the recent work of Frankston, Kahn, Narayanan, and Park showing that thresholds of increasing properties of binomial random discrete structures are at most a log-factor away from the so-called (fractional) expectation threshold. This fairly general result gives a new proof of the Johansson-Kahn-Vu theorem for perfect matchings in random hypergraphs.

Friday, December 6, 2019, 4:00 pm Mathematics and Science Center: MSC W303

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