Seminar on Combinatorial Computing
February 23, Wednesday, 6:20 p.m.
Room 3212, Graduate Center
365 Fifth Avenue, New York

Random Processes

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Abstract

The dynamic approach to random structures has proven valuable in the proofs of many essentially static statements. We explore three instances.

• Radhakrishnan and Srinivasan have shown that any $m = c2^{n-1}(n/\ln n)^{1/2}$ n-sets may be 2-colored (no set monochromatic) using a dynamic random recoloring.

• The speaker has shown that random greedy gives an asymptotic packing of hypergraphs under appropriate side conditions.

• Bollobás, Borgs, Chayes, Kim and Wilson have shown that the correct window for random 2-SAT is $m = 2n + \lambda n^{2/3}$ clauses. Connections to percolation at criticality are used to show that as $\lambda \to +\infty$ almost surely we can't get no satisfaction.

For further information contact Janos Pach at pach@cims.nyu.edu,
or visit our website: http://math.gc.cuny.edu/Seminars/Combinatorics.html