Quasirandom processes

James Propp
University of Massachusetts at Lowell

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007 Kemeny Hall, 4:00 pm
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Abstract

Probability theory is concerned with regularities in random processes, such as laws of large numbers and limit-shape theorems. Recent work by researchers at the interface between probability and combinatorics shows that many of these regularities apply, sometimes in dramatically heightened form, to quasirandom systems: simple deterministic systems whose microscopic behavior is designed to mimic the average case behavior of random systems. Quasirandom processes often possess a richness of structure not evident in the random processes that inspired them. This talk will address the questions: Where do pictures like http://rotor-router.mpi-inf.mpg.de/1Bio/?type=LRDU come from? And, what are they telling us?

This talk should be accessible to graduate students.