Department of Mathematics,
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Zoom for Thought

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Pseudo-Quasi-Random Boolean Functions

Abstract:

What makes the digits 64575131106459059050161575363926042571 0 and 10101001010100111111110101001110100101 11 so special? These digits look as if they were chosen at random, yet they are entirely deterministic (take the fractional part of the square root of 7). In this talk, I will explore the theory of quasi-randomness, which characterizes "random-like" sequences, graphs, sets, and many other objects. In particular, I will present a theory of quasi-randomness for Boolean functions and show how random Boolean functions lead to a very challenging open problem: the Inverse Theory of the Gowers Norms.

Tuesday, November 2, 2021
2:00 PM
Please see email with subject "Graduate Student Seminar Information."

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