

המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום שלישי, 13 בינואר, 2026

בשעה 14:30 – 15:30

ב-101 Math

ההרצאה

Chernoff and Expanders Dimensional High Inequalities

חינתן על-ידי

(IAS) Dikstein Yotam

תקציר: Chernoff's inequality is the most basic of probability theory. It states that the sum of independent random variables is close to its mean with high probability. The 'Chernoff-Expander-Graph' is a powerful extension of Chernoff's inequality, proven by Ajtai, Komlos, and Szemerédi in 1987. It asserts that Chernoff's inequality holds even when sampling from an expander graph instead of independently.

In this talk, we will discuss further generalizations and extensions of Chernoff's inequality. We will talk about high-dimensional expanders, which are sparse hypergraphs exhibiting pseudo-random properties. These are more sophisticated structures than graphs, but the return is that [AKS], of graphs expander the than structures sophisticated

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