

המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום שלישי, 27 במאי, 2025

בשעה 14:30 – 15:30

ב-101 Math

ההרצאה

covering improved and theorems Intersection via group, symmetric the for results hypercontractivity

תינתן על-ידי

(BIU) Keller Nathan

תקציר: In this talk we describe two seemingly unrelated results on symmetric theorems. In the first, we talk about a family A of t -intersecting permutations of S_n . Frankl and Deza conjectured in 1977 that for any t -intersecting family A of size maximal the $n > n_0(t)$, all for that all for conjecture the proved (2011 (JAMS, Pilpel and Friedgut Ellis, $(n-t)!$. is the that prove We $n > 2t$. all for holds it that conjectured and $n > \exp(\exp(t))$ asks problem well-known A c. constant some for $n > ct$ all for holds conjecture (=“covers”) contains A^2 square whose S_n of A subsets characterizing for of classes conjugacy of union a is A fi that show We A_n . group alternating the improves This $A^2 \subset A_n$ then $\exp(-n^{2/5-\epsilon})$ least at density

the obtained who (2008 Math., (Inventiones Shalev and Larsen of result seminal a
results two the of feature common The exponent. double the in $1/4$ with same
analytic surprisingly) (perhaps is which proofs, the in use we tool main the is
new the discuss shall We functions. global for inequalities hypercontractive -
(2024 JAMS Minzer, and Long Lfishitz, Keevash, by recently (introduced tool
applied. be may it which in directions other and
Sheinfeld Ohad and Minzer, Dor Lfishitz, Noam with works joint on Based