המחלקה למתמטיקה, בן-גוריון

## קולוקוויום

ביום שלישי, 24 בינואר, 2017

בשעה 14:30 – 14:30

ב101- Math

ההרצאה

## high-dimensional and designs, squares, Latin expanders

תינתן על-ידי

## ( (ETH Luria Zur

highly are They properties: wonderful many have graphs Expander :תקציר: mixing. rapidly are expanders on walks random and pseudorandom, connected, applicative both for fruiftul and useful immensely been has objects these of study The of study the in interest of lot a been has there Recently, fields. theoretical and competing Several hypergraphs. d-unfiorm to graphs expander of generalizations of property dffierent a to corresponding each proposed, been have definitions the and applications, their definitions, these Understanding graphs. expander field. emerging this of goal the is them between relations

the proved we Rosenthal, Ron and Lubotzky Alexander with work joint a In generalizes that concept a expanders, coboundary degree bounded of existence recent Keevash's Peter of use makes work Our graphs. in connectivity high designs of number constant a of union the that show We designs: of construction probability high with is construction random Keevash's to according constructed expander. coboundary good a

expander an which to extent the quantifies lemma mixing expander The there fi asked we Linial, Nati with work joint a In pseudorandom. is graph Latin typical a that conjectured we particular, In designs. pseudorandom exist concept Algebraic the for implications has This pseudorandom. is design square there that implies conjecture Our Gowers. by introduced groups, quasirandom of

fact. this prove we and quasigroups, quasirandom maximally exist research. further for directions promising many remain There