המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום *שלישי, 19 בנובמבר, 2024*

בשעה *14:30 – 15:30*

ב-*Math 101*

ההרצאה

conjecture Aldous-Lyons the and Tests Subgroup

תינתן על-ידי

NYU) institute, (Courant Chapman Michael

תקציר: The Aldous-Lyons conjecture from probability theory that states every finite graph can be approximated by finite (Benjamini-Schramm) graphs. This conjecture is an analogue of many influential conjectures in mathematics other than group theory. These problems include Connes' embedding problem (CEP) in functional analysis and operator algebras, Gromov-Weiss problem concerning how well certain infinite objects can be approximated by finite ones; Kaplansky's direct finiteness conjecture is known to be true for sofic groups, but still open for many other groups. Gottschalk's surjunctivity conjecture, which is also open for general sofic groups, is known to be true for finitely-approximated groups. For example, any group that is unrelated to the property, approximation was shown to be true for sofic groups. Quite remarkably, their results are deduced from complexity theory, specfiically Vidick, Natarajan, Ji, Wright and Yuen resolved the negative. In 2019, the CEP

by Inspired systems. proof interactive quantum certain in undecidability from the to related is which system proof interactive novel a suggest we work, their conjecture Aldous-Lyons the If way: following the in conjecture Aldous-Lyons A decidable. is system proof interactive this in language every then true, was is which Test, Subgroup a of that is purpose this for introduce we concept key Halting the from reduction a providing By Game. Non-local a of analogue our conjecture. Aldous-Lyons the refute we system, proof new this to Problem and Lubotzky, Alex Bowen, Lewis with work joint on based is talk This Vidick. Thomas be will theory complexity or theory probability in background special No assumed.