

המחלקה למתמטיקה, בן-גוריון

קולוקוויום

ביום שלישי, 1 בדצמבר, 2015

בשעה 14:30 – 15:30

ב-101 Math

ההרצאה

Theory Homotopy Chromatic and Ultra-Products

חינתן על-ידי

University) (Hebrew Schlank Tomer

תקציר: The spectra of category of one of the most important constructions in modern algebraic topology. It naturally appears in the study of cobordism classes of manifolds, of generalized classification of abelian groups. In the last years, the homotopical analog of abelian groups, Spectra, began to be developed by other authors and Lurie J. Spectra with algebraic analogs of non-commutative and commutative groups. Spectra play a central role in many theorems and developed, others many and lie-algebras modules, and tools the of some describe I'll case. classical the of analogs are that proved same The applications. some sketch and constructions this in appearing ideas the which zero) or p prime (a characteristics different in algebra do can one way possible all find can One $\text{Spec}(\mathbb{Z})$, scheme the of points as appear p where n) $(p$, pair a by classified are Those Spectra. of "characteristics" given a in Working height. a called number natural a is n and prime a is

at category $K(n)$ -local the called is what obtains one $p \nmid n$, characteristic height given a for that observation known well a is It p -prime and n -height Further, primes. enough small for only happen phenomena “special” certain n as algebraic and regular more become $C_{\{p,n\}}$ categories the sense, some in intuition this make to is talk this of goal The n -fixed a for infinity to goes p -precise.

method a have logicians structures, mathematical of sequence infinite an Given of notion a define shall We ultra-product. using by one limiting a construct to $D_{\{n,p\}}$ categories of collection a describe then and categories” of “ultraproduct the at category $K(n)$ -local the of analogs algebro-geometric as serve will which p -prime

prove: we n -height fixed a for Then

$$\prod_p^{\text{Ultra}} C_{n,p} \cong \prod_p^{\text{Ultra}} D_{n,p}$$

methods these use to attempts ongoing our describe shall we permits time If Drinfeld formal to corresponding category $K(n)$ -local the of version a get to groups). formal of (instead modules Barthel. T. and Stapleton N. with project joint a is This