

המחלקה למתמטיקה, בן-גוריון

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## אלגבראות אופרטורים

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ביום שלישי, 20 בדצמבר, 2016

בשעה 16:00 – 17:00

ב-101 Math

ההרצאה

### of dilations Cuntz-Krieger Choquet via families Toeplitz-Cuntz-Krieger theory

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**תקציר:** Perhaps the simplest result in operator theory is the dilation theorem of Sz Nagy. However, unitary dilations of isometries generalize to isometries on Hilbert spaces. Toeplitz-Cuntz-Krieger graphs, directed graphs, become more complicated. The analogue of the Cuntz-Krieger family (full) is a family of operators on a Hilbert space. The result of Zacharias and Skalski is that a graph with a sourceless and row-finite graph dilates to a graph with a sourceless and row-finite graph. We apply Arveson's theory of non-commutative Choquet theory to the question of dilating tensor products of boundary value problems for non-commutative Choquet theory.

-envelope  $C$  the of computation the on Kribs and Katsoulis of result a recover to able  
algebras. these of  
algebra operator the of boundary Choquet non-commutative the as However,  
any dilate to able are we  $C^*$ -envelope, the than information delicate more a is  
on progress make to able are we fact, In family. CK (full) a to family TCK  
multivariable the for asks that Zacharias, and Skalski of problem old decade a  
are we precisely, More theorem. dilation Ito's of result a generalizing analogue,  
according commute that  $G_1, \dots, G_d$  graphs of families TCK that show to able  
still that dilations CK have graph directed sourceless row-finite rank higher a to  
structure. graph rank higher the to according commute