

Department of Mathematics, BGU

OA/OT Seminar

On Tuesday, January ,14 2020

At 11:00 – 12:00

In 101-

Adam Dor-On (University of Copenhagen)

will talk about

Classification of irreversible and reversible operator algebras

Abstract: C^* -algebras have been intensely studied in recent years, especially through the lens of classification via K-theoretic invariants. Prominent advances include results for Cuntz-Krieger algebras of directed graphs. One such result of Cuntz and Krieger shows that the K-theory groups of such algebras essentially coincide with Bowen-Franks groups of the subshift of finite type associated to the graph.

On the other hand, classifying non-self-adjoint operator algebras is an effort initiated by Arveson in his late 60s paper on algebras arising from one-sided measure preserving dynamics. This was later taken up by Davidson and Katsoulis in the topological scenario, where they classified non-self-adjoint operator algebras arising from multidimensional one-sided dynamical systems on compact Hausdorff spaces.

In this talk we will connect, through examples, these traditionally unrelated classification schemes. We survey some pertinent results from the literature and uncover a striking hierarchy of classification for irreversible and reversible operator algebras.

Please Note the Unusual Time!