Department of Mathematics, BGU

Colloquium

On *Tuesday, April ,21 2015*

At *14:30 − 15:30*

In *Math 101-*

Marek Bozejko (University of Wroclaw)

will talk about

Non-commutative Brownian motions and Levy processes with applications to free probability and von Neumann algebras

Abstract: The subject of my talk will be the following topics: .1 Classical and non-commutative Brownian motions with realization on some Fock spaces.

.1 q-Brownian motions,q-CCR relations (a a- *qa* a (1= and theta functions of Jacobi.

.2 Meixner-Levy processes and relation to the free Levy processes.

4.Factorial q-von Neumann algebras and ultracontractivity of q-Ornstein-Uhlenbeck semigroup.