



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE  
Geometric Functional Analysis and Probability Seminar

Room 1 ,Ziskind Building  
on Thursday, Jul 16, 2015  
at 11:05

**NOTE UNUSUAL ROOM**

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Ergodic theorems for amenable groups

Abstract:

We will talk on the validity of the mean ergodic theorem along left Følner sequences in a countable amenable group  $G$ . Although the weak ergodic theorem always holds along any left Følner sequence in  $G$ , we will provide examples where the mean ergodic theorem fails in quite dramatic ways. On the other hand, if  $G$  does not admit any ICC quotients, e.g. if  $G$  is virtually nilpotent, then we will prove that the mean ergodic theorem does indeed hold along any left Følner sequence. Based on the joint work with M. Björklund (Chalmers).