The Department of Mathematics

2016–17–B term

Course Name Introduction to Von Neumann Algebras

Course Number 201.2.0061

Course web page
`https://www.math.bgu.ac.il//en/teaching/spring2017/courses/introduction-to-von-neumann-algebras`

Lecturer Dr. Daniel Markiewicz, <danielm@bgu.ac.il>, Office 206

Office Hours `https://www.math.bgu.ac.il/en/teaching/hours`

Abstract

Requirements and grading[1]

Course topics

Basics of C^*-Algebra theory. The spectral theorem for bounded normal operators and the Borel functional calculus. Basic theory of von Neumann algebras. Density theorems, topologies and normal maps, traces, comparison of projections, type classfiication, examples of factors. Additional topics, for example, noncommutative dynamics, subfactors, group actions, and free probability.

[1] Information may change during the first two weeks of the term. Please consult the webpage for updates