



Studies on Noncommutative Measure Theory in Kazan University (1968–2018)

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Abstract

We describe the main results of the participants of the scientific seminar “Operator algebras and their applications” at the Kazan University for the years 1968–2018. We also provide a list of selected works of the seminar participants.

Keywords Hilbert space · von Neumann algebra · Projection · Idempotent · Quantum logic · Measure · State · Weight · Bilinear form · Trace · Measure topology · Measurable operator · Noncommutative integration theory

1 Introduction

Scientific seminar “Operator algebras and their applications” (supervisor Anatolij Sherstnev) arised within N.G. Chebotarev Research Institute of Mathematics and Mechanics in the late 60ths. Beginning 1974, the seminar relocated to the Chair of Mathematical Analysis, where it is now going on to be active. The research results were presented in reviews [127, 160], and in books [96, 131].

The successful activity of the seminar has promoted its growth as an authority among the mathematical community. A subject issue (1982, no. 8) of “Izv. Vuzov. Matematika” was dedicated to Noncommutative Integration and related topics in Probability Theory and Mathematical Physics. It was Kazan State University who, together with Moscow and St. Petersburg State Universities, organized and held Summer Mathematical Schools on Noncommutative Probability Theory in 1971 and 1978 [1, 122]. The initiator was Yakov Sinai.

At the seminar well-known mathematicians such as Grigorij Amosov, Vladimir Chilin, Anatolij Dvurečenskij, Alexander Khelemskij, Robin Hudson, Oleg Smolyanov, Alexander Stern, Fedor Sukochev, etc. gave talks.

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