



ΕΘΝΙΚΟ ΚΑΙ ΚΑΠΟΔΙΣΤΡΙΑΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ
ΤΜΗΜΑ ΜΑΘΗΜΑΤΙΚΩΝ
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ΟΜΙΛΙΑ ΓΕΝΙΚΟΥ ΣΕΜΙΝΑΡΙΟΥ

Ομιλητής: *Professor A.Ya. Helemski, Moscow State (Lomonosov) University*

Τίτλος: *Extension and lifting problems in classical and quantum functional analysis*

Ημερομηνία: *Πέμπτη 10 Δεκεμβρίου*

Τόπος: Γ32 ώρα: 13:00

Abstract: *Extension and lifting problems inevitably appear in many branches of algebra, topology and functional analysis, classical and modern. In every mathematical science, they lead to the investigation of objects, that are most suitable for the solution of these problems. These are called injective and projective. After some general overview, we shall concentrate in a particular class of normed spaces, the so-called metrically projective spaces, and we shall present their complete description.*

In the second part of the talk we shall turn from classical to quantum functional analysis. We shall start with several principal notions and results of that area and then we shall consider extension and lifting problems in "quantum" context. This will lead to a certain specialization of a general mathematical concept, that of a free object. Free quantum spaces will be completely described and applied to the study of projective quantum spaces.