DEPARTAMENTO DE ANÁLISIS MATEMÁTICO Y MATEMÁTICA APLICADA

Facultad de Ciencias MATEMÁTICAS

Instituto de Matemática Interdisciplinar

SEMINARIO DE ANÁLISIS MATEMÁTICO Y MATEMÁTICA APLICADA

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Nuclear operators on Banach function spaces

The concept of nuclear operators between Banach spaces is due to Grothendieck [2], [3]. Nuclear operators are intimately tied to the topological tensor products of Banach spaces. In particular, nuclear operators defined on Banach function spaces have been studied intensively by Swartz [9], Diestel [1], Tong [10], Pietsch [8] and Nowak [4], [5], [6] [7] . For a Banach space E, we present characterizations of nuclear operators: $T : L^\infty(\mu) \to E$, $T : B(\Sigma) \to E$, $T : Cb(\Omega) \to E$ (here Ω is a completely regular Hausdorff space), in terms of their representing vector measures.

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Organized by: Departamento de Análisis Matemático y Matemática Aplicada and Instituto de Matemática Interdisciplinar (IMI)

Date: Wednesday, July 5, 2023,13:00h
Place: INF 4
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