Seminario de Análisis y Aplicaciones

Jueves, 15 de marzo de 2018

12:00 h., Sala Naranja (ICMAT - Campus de Cantoblanco)

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The noncommutative Khintchine inequality for interpolated spaces of Lp spaces

Resumen:

The Khintchine inequalities first appeared as a result about Rademacher variables in probability theory. Later they found applications to other topics in analysis and in particular in harmonic analysis for their relation to square functions and in Banach spaces theory were they have been further studied.

In noncommutative analysis, Lust-Piquard and Pisier found the right formulation for the Khintchine Inequalties in Lp for p ¿ 1. They were then generalised in two different ways: the class of spaces in which Khintchine type inequalities hold and the families of random variables that satisfy them. In this talk, we will do a short survey on the Khintchine inequalities and introduce noncommutative harmonic analysis. We present a new result in this context, the lower Khintchine inequality holds for all interpolated spaces of Lp-spaces.

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