Colloquium del Departamento

de Análisis Matemático

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"Non-unitarizable representations and Mazur's rotations problem"

Miércoles 18 de mayo de 2016
a las 13:00 horas en el seminario 222

Abstract:

Mazur's rotations problem asks whether any separable Banach space for which the isometry group acts transitively on the sphere must be linearly isomorphic or even isometric to the Hilbert space. We shall concentrate on the isometric part of the problem that is we ask if a transitive equivalent norm on the Hilbert must be a Hilbert norm.

We show how the existence of certain non-unitarizable, bounded representations of non-amenable groups on the Hilbert could be used to study the isometric version of Mazur's problem, and formulate some open questions. Joint work with Christian Rosendal.

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