SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 14 de febrero de 2020

11:30 h., Módulo 17 - Aula 520 (Depto. Matemáticas UAM)

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Diagonalization of Shift-Preserving Operators

Resumen:

In this talk we discuss the structure of bounded shift-preserving operators acting on shift-invariant spaces of $L^2(\mathbb{R}^d)$. For this, we work with an isometry called fiberization map and study the properties that the correspondent range function and range operator induce. We introduce a new notion of diagonalization for these operators which we call s-diagonalization and give a generalized Spectral Theorem for normal shift-preserving operators. Finally, we apply these results to a dynamical sampling problem. This work is in collaboration with A.Aguilera, C. Cabrelli and V. Paternostro.

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