Colloquium del Departamento de Análisis Matemático

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"On hypercyclic convolution operators on spaces of entire functions"

Lunes 6 de junio de 2016
a las 13:00 horas en el seminario 222

Abstract:

In this talk the theory of hypercyclicity of convolution operators on spaces of entire functions will be discussed and the focus will be in the following two recent results obtained together with J. Mujica:

(I) No translation operator on $H(C^N)$ is hypercyclic. Note that this result is in sharp contrast with the classical result of Birkhoff that every nontrivial translation operator on the space $H(C)$ is hypercyclic and a classical result due to Godefroy and Shapiro which asserts that every nontrivial convolution operator on the space $H(C^n)$, n in N, is hypercyclic.

(II) Every nontrivial convolution operator on the space $H_{\Theta b}(E)$ of all functions of Θ-bounded type from the Banach space E to C is frequently hypercyclic, a stronger property than hypercyclicity, which was introduced by Bayart and Grivaux in 2006.

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