

SEMINARIO IMAC DE ANÁLISIS



Conferencia a cargo de Carlos Lizama

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Spectral criteria for solvability of boundary value problems for time fractional differential equations.

ABSTRACT: We investigate mild solutions of the fractional order nonhomogeneous Cauchy problem $D^a u(t) = Au(t) + f(t)$ where $0 < a < 1$. When A is the generator of a C_0 -Semigroup on a Banach space X we obtain an explicit representation of mild solutions of the above problem in terms of the semigroup. We then prove that this problem under the boundary condition $u(0) = u(1)$ admits a unique mild solution if and only if the operator $I - S_a(1)$ is invertible. Here, we use a representation of S_a in terms of the semigroup and a Wright type function.

Fecha: 17 de octubre de 2016, a las 11:00 horas

Lugar: **IMAC** (Seminario T11329SD), ESTCE. Universitat Jaume I de Castelló