

# "Fractional Schrödinger equation with singular data and potential in a bounded domain"

## Abstract

In this talk I will present some recent results obtained for the Fractional Schrödinger equation in bounded domains. This problem involves a Fractional Laplacian on a bounded domain (there are several non-equivalent definitions) and a non-negative potential, which we will allow to be singular. We will discuss the critical cases of singularity of the potential at point and at the boundary, and the relation between the singularity of the potential and the class of admissible data, both for functions and measure. This is joint work with J.I. Díaz (UCM) and J.L. Vázquez (UAM).

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