

# SEMINAR

## Grupo de Análise Funcional e Aplicações Functional Analysis and Applications Group

### A Biorthogonal Approach to Infinite Dimensional Fractional Poisson Measures

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#### Abstract

We use a biorthogonal approach to the analysis of the infinite dimensional fractional Poisson measure. The complex Hilbert space w.r.t. these measures are described in terms of a proper system of generalized Appell polynomials. The kernels of the monomials may be expressed in terms of the Stirling operators of the first and second kind as well as the falling factorials in infinite dimensions. Associated to this system of Appell polynomials is the dual Appell system which is suitable to describe generalised functions. We then construct and characterize test and generalised functions in terms of integral transform as entire functions.

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**<https://videoconf-colibri.zoom.us/j/91004229085>**

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