

SEMINAR

on

COMPLEX AND HYPERCOMPLEX ANALYSIS

Sala Sousa Pinto, Departamento de Matemática 31/10/2025, 10:00

On g-orthogonal polynomials: a theoretical tool arising from applications

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In this talk we shall present a new class of special functions, by combining the very classical theory of univariate orthogonal polynomials with the Stieltjes derivatives: the g-orthogonal polynomials. Their origin comes from the need of this specific tools in a real-world application: mathematical modeling of the spread of Vespa Velutina, an invasive species that first arrived in Europe in 2004 coming from Asia.

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