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ESCOLA DE CIÊNCIAS E TECNOLOGIA
DEPARTAMENTO DE MATEMÁTICA



Centro de Investigação em Matemática e Aplicações
Departamento de Matemática
Programa de Doutoramento em Matemática

Seminário

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Zoom address: <https://videoconf-colibri.zoom.us/j/91482878119>

(Common) Meadows: A field of rings

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Abstract. Historically, the division by zero gave us fantastic (wrong) theorems such as $2 = 1$. However, we will see that it is not only possible to always divide by zero, but dividing by zero actually opens up new pathways. The algebraic structure that allows us to divide by zero, the meadow, was introduced by J. Bergstra. J. Bergstra defined several types of meadows, corresponding to various manners of dividing by zero. In this talk, I will focus on common meadows, where the process of dividing by zero is somewhat related with (Alexandroff) compactification. The algebraic properties of common meadows will be exposed which will allow us to see common meadows under a different lens.

(This is joint work with Bruno Dinis.)

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