
Seminário/Talk

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Local: Sala de reuniões do Departamento de Matemática (Bloco VI)

On our way to describe the unseen: dark energy, black holes and wormholes

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Resumo/Abstract:

In the current talk, we will first revise the well known Λ CDM model for several ranges of the equation of state parameter of the dark energy sector encoded on the parameter w . We will then present some phantom dark energy models that fully fit the available observational data. Those models are harmless from a quantum point of view, in the sense that the singularities or abrupt events they might induce are cured at the quantum level. In addition, some of those models can support regular blackholes as well as wormholes that do not require matter with a wrong kinetic term.

The talk is based on several works I did in recent years with colleagues from CMA-UBI (Portugal), Cologne University (Germany), Complutense University (Spain), NTU (Taiwan), Oujda University (Morocco) and Yangzhou University (China).