FACULDADE CIÊNCIAS
Departamento de Matemática

Centro de Matemática e Aplicações
Universidade da Beira Interior

Seminário/Talk

29/10/2021 | 15h
Local: Sala de reuniões do Departamento de Matemática (Bloco VI)

Central extensions of axial algebras

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Resumo/Abstract:

Axial algebras are a relatively new class of non-associative, commutative algebras introduced by Hall, Rehren and Shpectorov in 2015 as a generalization of Majorana algebras. In this talk, we will give a quick overview of the basic definitions and the current classification of axial algebras, and present a technique for constructing new examples based on central extensions. In particular, we will study when a commutative central extension of an axial algebra is again axial, relate properties of the base algebra to those of the extension, and analyse how this technique affects our understanding of 2-generated axial algebras of Monster type $(2, \frac{1}{2})$. This talk is based on joint work with Ivan Kaygorodov and Cándido Martín González.

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