Algebra Seminar

On power-associative modules

Elkin Quintero Vanegas
Universidade Federal do Amazonas

Date: April 01, 2022

Time: 2:30 pm

Acesso à sala virtual:
https://us02web.zoom.us/j/88339053665?pwd=S2xCeFR3VUdCdGZHUnpCZHZRbjZQdz09
ID da reunião: 883 3905 3665 Senha de acesso: 975213

Abstract. In this talk we introduce the modules over the class of commutative power-associative algebras and we connect Albert's problem, (a problem of classification of finite dimensional algebras) with irreducible modules. Furthermore, for any $n \in \mathbb{Z}^+$, we associate for the irreducible $\mathfrak{sl}_2(\mathbb{C})$-module of dimension n an irreducible module of dimension $3n$ of the zero algebra of dimension four. Thus, we have examples of commutative power-associative algebras where its multiplicative enveloping algebra is either finite or infinite dimensional, so far as Jordan as well as Lie algebras.