

Algebra, Combinatorics and Number Theory Seminar

Date. Wednesday, March 06, 2024 - 11am (FC1 007) ¹

Speaker. Renato Fehlbeg Júnior - Universidade Federal do Espírito Santo - Brasil

Title. On the Kantor product and conservative algebras

Abstract.

In 1972, Kantor introduced the class of conservative algebras, which contains many other important classes of algebras, for example, associative, Lie, Jordan, and Leibniz algebras. Initially, we will discuss some known results about conservative algebras, and especially the algebra $U(n)$ (space of bilinear multiplications on the n -dimensional space V_n). Then, we will present results obtained on the study of the Kantor product (product defined in $U(n)$). In particular, we will study the Kantor product of some finite-dimensional algebras. In addition, we will present a constructive method for obtaining new transposed Poisson and Poisson-Novikov algebras, and also a method for classifying Poisson structures on a given algebra. This is a joint work with Ivan Kaygorodov.

¹<https://videoconf-colibri.zoom.us/j/7820604023>