Universidade Estadual de Campinas
Instituto de Matemática, Estatística e Computação Científica

Seminários de Álgebra – 1S 2026

Axial Algebras

Ilya Gorshkov (Sobolev Institute of Mathematics)

26/03/2026

Resumo: Axial algebras are a class of nonassociative commutative algebras whose properties are defined using a fusion law. When this fusion law is 2-graded, the algebra has a naturally associated automorphism group generated by involutions, and thus axial algebras are related to the theory of finite simple groups. Examples of axial algebras are finite-dimensional simple Jordan algebras and the Grice algebra. In this talk, we generalize the theory of axial algebras and construct an algebra whose automorphism groups contain free Burnside groups.