Online Algebra, Logic, and Topology Seminar Category Theory Seminar — Abstract

October 07, 2025

Noncommutative Poisson structure and invariants of matrices

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Date & Time: October 07, 2025 (Tuesday) — 4:00 PM (Coimbra time)

Place: Google Meet

Abstract. In this talk we will explain how we used methods coming from non-associative algebras and from computational algebra to obtain the full description of the ring of invariants of pairs of 4×4 matrices, which could not be solved using the standard representation theory methods. Moreover, we will talk about its connection with the Calogero–Moser spaces and the Hilbert scheme of points.

(Joint work with Farkhod Eshmatov and Rustam Turdibaev.)