Programa de Pós-Graduação em Matemática

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APRESENTA:

Differential identities: their structure and growth

02/05/2025 às 10h00

Online via Link
https://meet.google.com/mjp-easy-vai

Profª. Dra. Carla Rizzo

CMUC, Department of Mathematics,

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UNIVERSIDADE FEDERAL DE CAMPINA GRANDE
CENTRO DE CIÊNCIAS E TECNOLOGIA
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CICLO DE CONFERÊNCIAS 2025
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Differential identities: their structure and growth.

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Resumo. Let F be a field of characteristic zero, L be a Lie algebra over F, and A be an L-algebra - that is, an associative algebra over F with an L-action by derivations. This action extends naturally to the universal enveloping algebra $U(L)$ of L, giving rise to the notion of differential identities (or L-identities) of A: non-commutative polynomials in variables of the form $x^u := u(x)$, where $u \in U(L)$, that vanish under all substitutions from A.

In this talk, I will present recent results on the differential identities of L-algebras, with a focus on their classification and growth behavior.

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