

Séminaire d'Algèbre, Topologie et Géométrie

Jeudi 31 Mai à 14h00

Salle I

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Title : *Bernstein-Sato identities in topology, geometry, and arithmetic.*

Abstract : Bernstein-Sato identities are available for any collection of polynomials and generalize the classic Cayley identity for powers of the determinant of a square matrix of indeterminates. Initially used to answer a question of Gelfand about how to define complex powers of a polynomial, they have found numerous applications since then.

We will give an overview of the subject. We will explain for example their connection with singularity theory and their role in counting solutions modulo prime powers. We will also present a conjectural relation to characteristic varieties of local systems.