

Diego Izquierdo , Ecole Polytechnique

Title: *Arithmetic of equations in a large number of variables*

Abstract: In this talk, we will be interested in the arithmetic of equations in a large number of variables and with low degree. I will start by presenting the general framework and the motivations. I will then focus on some conjectures of Kato and Kuzumaki that aim at relating the Diophantine properties of fields to their Galois cohomology and their K-theory. I will finish the talk by overviewing several recent results that I have obtained with Giancarlo Lucchini Arteche in this context.