Conferencia:

Santaló 2026

La Facultad de Ciencias Matemáticas y la Revista Matemática Complutense organizan anualmente la Conferencia Santaló, en memoria de Luis Santaló (1911-2001), doctor por esta universidad. La conferencia es impartida cada año por un/a profesor/a de reconocido prestigio.
La conferenciante de este curso es:

Claire Voisin

CNRS – Institut de Mathématiques de Jussieu-Paris Rive Gauche, Sorbonne Université (Francia)

Points and zero-cycles of algebraic varieties

An algebraic variety X is defined by polynomial equations in an ambient space. The defining equations have coefficients in a field K. When K is not algebraically closed, there might be no points of X defined over K, but there are always points defined over finite extensions of K, if X is non-empty.
The lecturer will introduce the Chow group of zero-cycles of X, which is built on these points and gives a partial way of computing them, and its universal Chow group. The Chow group $CH_0(X)$ of zero-cycles on X contains very important information. If the field K is the field of complex numbers, one knows that it is related to holomorphic forms on X (Mumford). Over non-algebraically closed fields, the universal Chow group of zero-cycles is related to rationality properties of X.
The lecturer will discuss the notion of Mumford's finite vs infinite dimensionality of CH_0 and, on the arithmetic side, the recently developed notion of boundedness vs unboundedness of CH_0. The lecturer will also present related boundedness vs unboundedness statements for points on Fano hypersurfaces.

Jueves, 01 de octubre de 2026, a las 13:00
Aula Miguel de Guzmán
Evento Online: Canal YouTube de la Facultad de CC. Matemáticas

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