Conferencia

SANTALÓ 2015

Hélène Esnault

Freie Universität Berlin

Fundamental Groups in Algebraic Geometry

Poincaré defined the notion of Fundamental Group of a topological manifold in the 'Analysis Situs' 1895. The concept has its roots in the work of Riemann 40 years earlier, in which he defined and studied some mutli-valued functions on Riemann Surfaces. So essentially from the beginning, the Fundamental Group was an important invariant in Analytic Geometry.

In the lecture, we shall survey some of the developments in the 70s, due to Grothendieck, which link the Fundamental Group to Algebraic Geometry.

We shall then discuss some analogies between complex geometry and geometry over finite fields. Among them is Deligne's recent Finiteness Theorem (2011), also our solution (with Mehta) to Gieseker's conjecture and our partial solution (with Shiho) to de Jong's conjecture

JUEVES, 8 DE OCTUBRE DE 2015 , 13:00 HORAS
AULA S-118 "MIGUEL DE GUZMÁN"
FACULTAD CC. MATEMÁTICAS