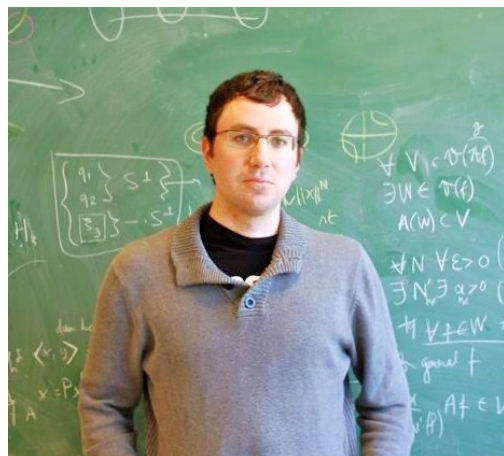


MASSACHUSETTS INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MATHEMATICS

Geometric Analysis Seminar



Wednesday
October 29, 2025
4:00 – 5:00 PM
Building 2, Room 131

Álvaro Pelayo

*Royal Spanish Academy of Sciences,
Complutense University*

Geometric and analytic theory of integrable systems

Abstract:

This talk is a general audience introduction to the geometric and analytic properties of finite dimensional integrable systems. I will first give an overview of their local theory, linearization of singularities, symplectic invariants and spectral properties. Then I will discuss recent progress on their global theory and the inverse spectral problem for quantum systems as well as an approach to incorporate p-adic analytic methods into the subject.