



DEPARTAMENTO DE  
ANÁLISIS MATEMÁTICO Y  
MATEMÁTICA APLICADA



Facultad de Ciencias  
**MATEMÁTICAS**



# **SEMINARIO DE ANÁLISIS MATEMÁTICO Y MATEMÁTICA APLICADA**

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## **Curved commutators in the plane**

### **Abstract:**

In this talk, I will speak about how we complete the  $L^p$  boundedness theory of commutators of Hilbert transforms along monomial curves by providing the previously missing lower bounds. This optimal result now covers all monomial curves while previous results had significant geometric restrictions. We also, for the first time, develop the corresponding necessity theory for curves with non-vanishing torsion.

**Organized by: Departamento de Análisis Matemático y Matemática Aplicada and Instituto de Matemática Interdisciplinar (IMI)**

**Date: Thursday, June 27, 2024, 13:00h**

**Place: Seminario Alberto Dou (Room 209)**

**Facultad de CC. Matemáticas, UCM**