NEW ESTIMATES FOR MAXIMAL FUNCTIONS

SPEAKER: Oscar Domínguez (Universidad Complutense de Madrid)

DATE: Friday, January 17, 2020 - 11:30

VENUE: Aula Naranja, ICMAT

ORGANISERS: UAM-ICMAT

ABSTRACT: Maximal functions play a central role in the study of differentiation, singular integrals and almost everywhere convergence. With Sergey Tikhonov (ICREA) we recently proved some pointwise estimates for maximal functions in terms of smoothness and rearrangements. I plan to discuss the recent progress on these topics and some applications. In particular, I will discuss the Fefferman-Stein inequality for the sharp maximal function for r.i. spaces which are close to $L_{\infty}$.