

# SEMINARIO DE ANÁLISIS Y APLICACIONES

Lunes, 2 de diciembre de 2019

15:30 h., Módulo 17 - Aula 520 (Dept. Matemáticas UAM)

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$L^p$  improving estimates for circular  
maximal functions

## Resumen:

For  $f \in L^p(\mathbb{R}^2)$ , let  $A_r f(x)$  be the mean of  $f$  over the circle of radius  $r$  centered at  $x$ . For a set  $E \subset [1, 2]$  one can ask about  $L^p \rightarrow L^q$  estimates for the maximal function  $\sup_{r \in E} |A_r f(x)|$ . How does the  $(p, q)$ -parameter range for such estimates depend on the set  $E$ ? We discuss results from two recent papers, one with Theresa Anderson, Kevin Hughes and Joris Roos, and one with Joris Roos.

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