

XXXII MEMORIAL RUBIO DE FRANCIA

Viernes, 6 de noviembre de 2020

12:00 h., **ONLINE** - URL: <https://conecta.csic.es/b/jos-ajp-qp4>

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Fractional Poincaré inequalities through
Harmonic Analysis

Resumen:

In this expository lecture we will discuss some recent results concerning fractional Poincaré and Poincaré-Sobolev inequalities with weights, the degeneracy. These results improve some well known estimates due to Fabes-Kenig-Serapioni from the 80's in connection with the local regularity of solutions of degenerate elliptic equations and also some more recent results by Bourgain-Brezis-Minoreescu. Our approach is different from the usual ones and it is based on methods that come from Harmonic Analysis and one of them is the extrapolation theorem of José Luis Rubio de Francia.

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