UNIVERSITÀ DI PARMA

Dipartimento di Scienze Matematiche, Fisiche e Informatiche

Seminario di Analisi Matematica

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Pointwise estimates and fine higher regularity for nonlocal equations with irregular coefficients

Martedì 13 giugno 2023, ore **14:30**
Aula A, Piano -1, Plesso di Matematica e Informatica

Abstract: *We consider nonlocal equations with irregular coefficients and present pointwise gradient estimates in terms of Riesz potentials as well as estimates in terms of certain fractional maximal functions. These pointwise estimates lead to fine higher regularity results in many commonly used function spaces, in the sense that they enable us to detect finer scales that are difficult to reach by more traditional methods. In the case of estimates below the gradient level, we are also able to treat nonlinear equations of fractional p-Laplacian-type. The talk is based on joint works with Lars Diening, Tuomo Kuusi and Yannick Sire.*

Organizzatori proff. Alessandra Lunardi e Giampiero Palatucci