



# UNIVERSITÀ DI PARMA

Dipartimento di Scienze Matematiche, Fisiche e Informatiche

## Seminario di Analisi Matematica



### Antonin Chambolle

On the jump set of minimizers  
of Total-Variation based  
regularization problems

**Mercoledì 10 gennaio 2024, ore 15:00**

**Aula C, Piano -1, Plesso di Matematica e Informatica**

*Abstract: In this joint work with M. Lasica (Warsaw) we revisit old results on the localization of the jump set of minimizer of the “Rudin-Osher-Fatemi” functional, that is, the total variation plus a quadratic penalization. We give more natural and simpler proof of the fact that the jump set of the solution is contained in the jump set of the data, and characterize the total-variation type functionals, in both scalar and vectorial settings, for which the result holds true. We also consider higher order regularizing functionals, for which some partial results hold.*

