UNIVERSITÀ CATTOLICA
del Sacro Cuore

**Dipartimento di Matematica per le Scienze economiche, finanziarie ed attuariali**

Nell'ambito delle iniziative seminariali del Dipartimento, rivolte alla ricerca ed alla didattica avanzata,

**giovedì 15 aprile 2025, alle ore 11.30**
**presso l'Aula 200 – via Necchi 9**

si svolgerà il **SEMINARIO**

**"Iterative (and implicit) regularization"**
**Cesare Molinari**
**(Università degli studi di Genova)**

Iterative regularization exploits the implicit bias of an optimization algorithm to regularize ill-posed problems. Constructing algorithms with such built-in regularization mechanisms is a classic challenge in inverse problems but also in modern machine learning, where it provides both a new perspective on algorithms analysis, and significant speed-ups compared to explicit regularization. In this talk, we present the first iterative regularization procedure able to handle biases described by non smooth and non strongly convex functionals, prominent in low-complexity regularization. Our approach is based on a primal-dual algorithm of which we analyze convergence and stability properties, even in the case where the original problem is infeasible. The general results are illustrated considering the special case of sparse recovery with the L1 penalty.

Tutti gli interessati sono invitati a partecipare.

Per partecipare da remoto CLICCA QUI