



## **Seminario di Analisi Matematica**

martedì 17 febbraio 2026, ore 16:00  
Dipartimento di Matematica e Fisica  
Aula M1, edificio aule, L.go S.L. Murialdo 1

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### **Nonlocal regularization of conservation laws**

#### **Abstract**

Nonlocal regularization of conservation laws consists in conservation laws in which the flux function depends on the solution through the convolution with an exponential kernel. We study two singular limits associated to the problem: 1) the convergence of the solutions as the nonlocality shrinks to a local evaluation, i.e., when the kernel tends to a Dirac delta distribution; 2) the long-time behavior as the time tends to infinity.

This talk is based on works in collaboration with M. Colombo, J.-M. Coron, G. Crippa, N. De Nitti, K. Huang, K. H. Karlsen, A. Keimer, E. Marconi, L. Pflug, N. H. Risebro, L. V. Spinolo, and E. Zuazua.