

Date: May 22, 2025**Time:** 15:00 CET**Room:** CRM Auditorium (Universitat Autònoma de Barcelona)

Global minimizers of Interaction Energies

José Antonio Carrillo

University of Oxford

I will review the existence and uniqueness of global minimizers for interaction energy functionals. Euler-Lagrange equations in the infinity wasserstein distance will be discussed. Based on linear convexity/concavity arguments, qualitative properties of the global minimizers will also be treated. Anisotropic singular potentials appearing in dislocations will be shown to have rich qualitative properties with loss of dimension and ranges of explicit minimizers. This talk will be based on several works in collaboration with Ruiwen Shu.