Antonio Esposito

Nonlinear cross-diffusion and nonlocal interaction systems

We are dealing with systems of partial differential equations with nonlinear cross-diffusion and nonlocal interactions under a uniform coercivity assumption on the diffusion part. This kind of systems has several applications in the social sciences, finance, biology and real world problems. We provide existence of weak measure solutions by means of a semi-implicit version of the JKO scheme and the flow interchange technique.