Codigo del Proyecto: PID2022-143012NA-I00

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Título del proyecto Generación del Conocimiento: ECUACIONES CINETICAS PARA SISTEMAS DE PARTICULAS NO LOCALES DE ALTA DIMENSION: LIMITES MACROSCOPICOS, ANALISIS Y METODOS NUMERICOS (macroKNIGHTs)

Objeto del contrato: realización de la tesis doctoral en el marco del proyecto financiado

Tentative title: "Opinion consensus reached through uninformed individuals: A Boltzmann-type description"

Abstract of the project: The influence of leaders to control the public opinion is a concept that has been largely studied. However, it has been argued that the presence of uninformed or naive individuals destabilises the capacity for collective intelligence in groups and dilutes the role of the leaders. The main goal of the project is to study the effect of uninformed individuals in the opinion formation process in follower-leader opinion dynamics. The system is going to have three different populations: leaders, followers and uninformed individuals. Defining the pairwise interactions between the different populations is the bottleneck and a central point in the derivation of a continuous mean field limit model.Other questions such as what is the critical size of the uninformed population to restore control to the numerical majority, or what is the maximum density of uninformed individuals that allows consensus, will also be addressed.

This project is **co-supervised** with Marie-Therese Wolfram, from Warwick University, U.K.