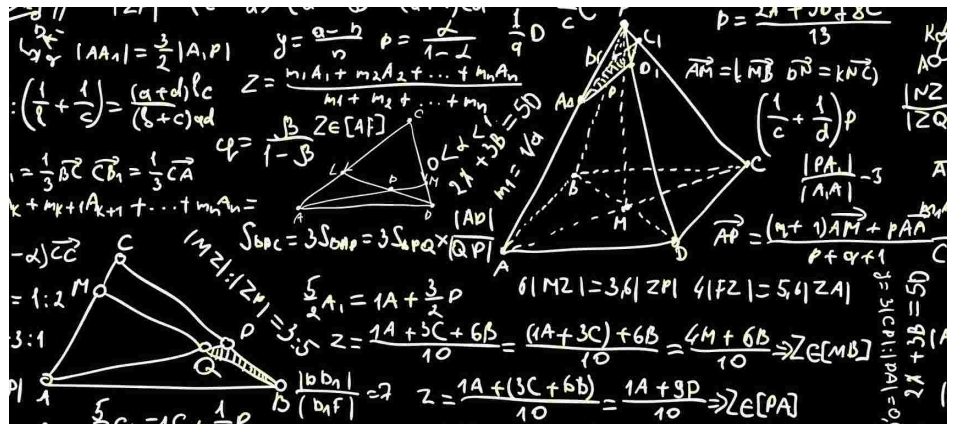MAI

30

17:15

Mathematik Kolloquium Innsbruck

José Antonio Carrillo de la Plata

University of Oxford

Aggregation-diffusion and kinetic PDEs for collective behavior: applications in the sciences

I will present a survey of micro, meso and macroscopic models where repulsion and attraction effects are included through pairwise potentials. I will discuss their interesting mathematical features and applications in mathematical biology and engineering. Qualitative properties of local minimizers of the interaction energies are crucial in order to understand these complex behaviors. I will showcase the breadth of possible applications with three different phenomena in applications: segregation, phase transitions and consensus.

Montag 30. Mai 2022, 17:15 Uhr, HS E
Gäste und Studierende sind herzlich willkommen!

Institut für Mathematik, Universität Innsbruck, Technikerstraße 13, 7. Stock