

Seminario de análisis matemático y aplicaciones
Analisi matematikoa eta aplikazioak mintegia

**A KINETIC REACTION MODEL:
DECAY TO EQUILIBRIUM AND
MACROSCOPIC LIMIT**

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ABSTRACT: We propose a kinetic relaxation-model to describe a generation-recombination reaction of two species. Decay to the stationary solution is studied by using hypocoercivity of the linearized equations. Exponential decay of small perturbations can be shown for the full nonlinear problem. We will give a short comparison of recent methods for tackling such problems. If time allows we will also discuss the macroscopic/fast-reaction limit and sketch a rigorous derivation using Entropy decay estimates. The macroscopic limit, in our case, is a nonlinear diffusion equation for the difference of the position densities. This talk is based on joint work with C. Schmeiser (University Vienna).

LUGAR / LEKUA:
Sala de seminarios de la sección de matemáticas
Matematika ataleko mintegi gela

DÍA Y HORA / EGUNA ETA ORDUA:
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