

WORKING PIZZA SEMINAR ON PDE'S AND FLUID MECHANICS

Miércoles, 25 de febrero de 2015

13:45 h., Aula Gris 1 (ICMat, Campus de Cantoblanco)

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Existence and multiplicity results of
Fourth-Order Semilinear Parabolic
Equations of Cahn–Hilliard Type

Resumen:

Assuming fourth-order semilinear parabolic equations of the Cahn–Hilliard-type

$$u_t + \Delta^2 u = \gamma u \pm \Delta(|u|^{p-1}u) \quad \text{in } \Omega \times \mathbb{R}_+,$$

we will discuss several aspects regarding existence and multiplicity results of classic steady states when $\Omega \subset \mathbb{R}^N$ is a bounded domain under Navier boundary conditions and, also, considering the whole \mathbb{R}^N and in a class of functions properly decaying at infinity,

$$\lim_{|x| \rightarrow \infty} u(x) = 0.$$

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