## **SEMINARIO**

## Departamentos de Física Teórica I y II Universidad Complutense de Madrid

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TITULO: Stochastic field theories on expanding domains and other non-equilibrium stories

**LUGAR: FACULTAD DE CIENCIAS FÍSICAS UCM** 

**DÍA**: 11 de diciembre, 2012 (Martes)

**HORA**: 14:30

AULA: Seminario Depto. Física Teórica I, Planta 3ª

## **ABSTRACT**

We will consider families of stochastic field theories set on spatial domains whose size is growing in time. We will review the basic phenomenology that includes the dependence on the initial conditions, existence of conserved quantities, behavior of correlations etc. The main questions we will try to address are unveiling the conditions under which the field becomes uniform on the large scale and what do we mean by uniformity in this case. If time allows, we will briefly mention two other non-equilibrium problems, the first being the analysis of the dynamics of a reaction-diffusion system on an expanding domain, and the second related to a coagulation process that involves two different species.