



**Mês de: Setembro 2011**

## **SEMINÁRIO DE ANÁLISE E EQUAÇÕES DIFERENCIAIS**

**Dia 22 de Setembro (quinta-feira), às 13h30, na Sala B3-01**

“Existence and concentration for nonlinear Schrodinger equations with fast decaying potentials”

*Vitaly Moroz*

(Swansea University, UK)

**Abstract:**

We discuss the existence of stationary positive solutions for a class of nonlinear Schrodinger equations. Amongst other results, we prove the existence of semi-classical solutions which concentrate around a positive local minimum of the potential. The novelty is that no restriction is imposed on the rate of decay of the potential at infinity. In particular, we cover the case where the potential is compactly supported. This is a joint work with Jean Van Schaftingen (Louvain-la-Neuve, Belgium).

**Dia 22 de Setembro (quinta-feira), às 15h, na Sala B2-01**

“Dynamics around periodic minimals”

*Antonio Ureña*

(Swansea University, UK)

**Abstract:**

We study the dynamics of Euler-Lagrange systems in the vicinity of a periodic, globally minimizing solution. An elementary proof showing that such a solution must be unstable is provided. If the system is reversible, nondegenerate minimizers must be hyperbolic. Applications are given for autonomous systems with a discrete symmetry.

Parcialmente suportado pela FCT ao abrigo do Financiamento Base

Local:  
**Instituto para a Investigação Interdisciplinar**  
Av. Prof. Gama Pinto, 2  
1649-003 Lisboa

