



## Instituto de Estructura de la Materia - Ciclo de Seminarios 2010-2011

### Seminario del Departamento de Física Molecular

**Quantum dynamics: from ultracold atomic gases to photosynthetic light-harvesting complexes**

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We introduce two different physical systems whose properties can be studied using quantum mechanical tools. First we will introduce dilute ultracold gases, where dissipation can be effectively controlled during the experimental lifetime and a full quantum mechanical approach can be used to describe them. In particular we will discuss particle current generation and different theoretical proposals for the experimental detection of the many-body quantum states which can be created in the experiments. Second we will introduce the light-harvesting complexes and the exciton model, strongly coupled to the dissipative environment, used to describe the energy transfer in these systems.

**Martes, 31 de Mayo de 2011, 12:00 horas.**

*Sala de Conferencias. Centro de Física "Miguel A. Catalán".*

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