



## **SEMINAIRE ISMO**

**German Rojas-Lorenzo**

*Instituto de Física Fundamental (CSIC), Serrano, Madrid, Spain  
Instituto Superior de Tecnologías y Ciencias Aplicadas,  
La Habana, Cuba*

### **STOCHASTIC DYNAMICS OF TWO LEVEL SYSTEMS: LANGEVIN CANONICAL APPROACH**

A canonical framework for two–level quantum systems is employed to derive, from a dynamical theory, the thermodynamic equilibrium values of both the population difference and coherences. Incoherent and coherent tunneling is analyzed and compared to path–integral results of the reduced density matrix in the weak Ohmic dissipative regime for moderate–to–high temperatures.

**Mardi 1<sup>er</sup> Juillet 2014 à 11h**  
**Bât. 210 – Amphi 1 (2<sup>ème</sup> étage)**  
*Université Paris-Sud 91405 ORSAY Cedex*