

**SEMINARIO**  
**Departamentos de Física Teórica I y II**  
**Universidad Complutense de Madrid**

**CONFERENCIANTE:** Guillermo Mena Marugán

Instituto de Estructura de la Materia IEM (CSIC), Madrid

**TITULO:** Holography and the Dirac Large Numbers Hypothesis

**LUGAR:** FACULTAD DE CIENCIAS FÍSICAS UCM

**DÍA:** 13 de mayo, 2015 (Miércoles)

**HORA:** 14:30

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

**ABSTRACT:**

The large numbers hypothesis by Dirac is motivated by certain scale transformations which relate the parameters of the macro- and the micro-physics. In our talk, we will discuss how such relations can be explained based on the holographic N-bound, as suggested by Bousso, and on a series of purely cosmological observations, namely that the universe is in good approximation homogeneous, isotropic and flat, and that at present the cosmological constant dominates over the energy density.