



UNIVERSITY OF CRETE
DEPARTMENT OF PHYSICS



QCN

CRETE CENTER FOR
QUANTUM COMPLEXITY
AND NANOTECHNOLOGY

ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 13 March 2014

17:00 -18:00

3rd Floor Seminar Room

“Smaller is different and more: surprises in low dimensional superconductivity”

Dr. Antonio Garcia-Garcia

Cavendish Laboratory, Cambridge University, UK

Abstract

I review recent experimental and theoretical advances in the problem of superconductivity in nanograins, thin films, heterostructures and Josephson arrays of nanograins of conventional and high temperature superconductors. As a guiding principle the talk focuses on theoretical mechanisms and experimental settings that can exploit quantum size and non equilibrium effects to boost superconductivity in these systems.