CRETE CENTER FOR QUANTUM COMPLEXITY AND NANOTECHNOLOGY

UNIVERSITY OF CRETE
DEPARTMENT OF PHYSICS

CAPACITIES

# ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

# PHYSICS COLLOQUIUM

**Thursday, 16 November 2017**

**17:00 -18:00**

**3rd Floor Seminar Room**

## "The large d approximation strategy in liquids and glasses"

**Prof. Jorge Kurchan**

École Normale Supérieure, Paris, France

## Abstract

*A difficulty in theoretical physics that is often encountered is the absence of small parameters. An often used remedy to this situation is to promote the system to d dimensions, solve the large d limit, and (eventually) expand around. This strategy has been used with success in several fields, most notably strongly coupled electrons, atomic physics and gauge theory. A recent promising development is the large d theory of liquids and glasses, in and out of equilibrium. I will describe the basic ideas and if (and how) the results match our previous understanding of these systems.*