Title: Beyond the Standard Model

**Lecturer:** Dr Elias Kiritsis

#### **Date and Times:**

- 28th July at 9:15

- 29th July at 9:15

- 30th July at 9:15

- 31st July at 9:15

### Summary of the proposed talk:

The necessity for new physics beyond the Standard Model will be motivated. Theoretical problems will be exposed and possible solutions will be described. The goal is to present the exciting new physics ideas that will be tested in the near future. Supersymmetry, grand unification, extra dimensions and string theory will be presented.

### Prerequisite knowledge and references:

Good quantum mechanics and special relativity. Elements of Quantum Field Theory are a plus.

The courses of G.G. Ross and A. Pich in this year's series of lectures.

# **Biography-**

## **Brief CV:**

1980-84: Undergraduate Degree in Physics, University of Athens

1984-88: PhD in Physics, Caltech

1988-91: Postdoctoral Fellow at UC Berkeley

1991-92: Attache de Recherche, Laboratoire de Physique Théorique, ENS, Paris.

1992-98: TH staff member, CERN.

1998- Professor of Physics, University of Crete

2002- Directeur de Recherche au CNRS, Centre de Physique Théorique, Ecole Polytechnique.

Interests include field theory and string theory, gauge theories and strong coupling physics, and

string cosmology.

### **Publications:**

Publications obtainable from SPIRES:

http://www.slac.stanford.edu/spires/find/hep/www?rawcmd=a+kiritsis

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