

**Title:** Beyond the Standard Model

**Lecturer:** Dr Kiritsis, E.

**Date and Times:** 1<sup>st</sup> August at 10:15  
2<sup>nd</sup> August at 09:15  
2<sup>nd</sup> August at 10:15  
3<sup>rd</sup> August at 10:15

**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

### Dr Elias Kiritsis

**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 Theorique, ENS, Paris.

**1992-98:** TH staff member, CERN.

**1998-** Professor of Physics, University of Crete

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

Interests include field theory and string theory, gauge theories and strong coupling physics, and string cosmology. Publications obtainable from SPIRES:

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