

**Title:** The Standard Model

**Lecturer:** Dr PICH, A

**Date and Times:** 22<sup>nd</sup> July at 11:15  
25<sup>th</sup> July at 09:15  
25<sup>th</sup> July at 10:15  
26<sup>th</sup> July at 09:15  
27<sup>th</sup> July at 09:15  
27<sup>th</sup> July at 10:15  
28<sup>th</sup> July at 09:15  
29<sup>th</sup> July at 09:15

### **Summary of the proposed talk**

The Standard Model of Elementary Particle Physics will be described. A detailed discussion of the particle content, structure and symmetries of the theory will be given, together with an overview of the most important experimental facts which have established this theoretical framework as the Standard Theory of particle interactions.

### **Prerequisite knowledge and references**

Quantum Mechanics Suggested Reading:

- A. Pich, "The Standard Model of Electroweak Interactions", arXiv:hep-ph/0502010
- A. Pich, "Aspects of Quantum Chromodynamics", arXiv:hep-ph/0001118
- A. Pich, "The Standard Model of Particle Physics"
- 2004 CERN Summer Student Lectures:

<http://agenda.cern.ch/tools/SSLPdisplay.php?stdate=2004-07-05&nbweeks=7>

## **Biography**

**Doctor Antonio Pich:**

***Research Lines:***

- Theoretical Physics, Quantum Field Theory
- Particle Physics Phenomenology (Electroweak & Strong interactions)
- Flavour dynamics. CP violation

***Present Status :***

- Since 1997: Editor JHEP

- Since 1998: Professor of theoretical Physics, Instituto de Fisica Corpuscular (IFIC), University of Valencia- CSIC

***Brief CV:***

- 1979: Physics Diploma, University of Valencia
- 1983: PhD, University of Valencia
- 1984-1986: Post-Doc Max-Planck Institut, Munich
- 1987-1988: CERN Fellow
- 1989-1990 and 1994-1998: CSIC Research staff
- 1991-1993: CERN research staff (TH division)

***Publications:***

- 137 entries in SPIRES

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