

Title: Prof.

Lecturer: John Terning

Date and Times:

- Monday 12th July from 10:15am-12:00am
- Tuesday 13th July from 09: 10:15am-12:00am
- Wednesday 14th July from 10:15am-12:00am

Summary of the proposed talk: The Standard Model

I will give a brief review of relativity and quantum mechanics, before discussing the particles and interactions of the standard model of particles physics. I will describe Feynman diagrams, gauge interactions, running couplings, confinement, and electroweak symmetry breaking. Finally I will look at how these particles manifest themselves at the LHC.

Prerequisite knowledge and references:

Understanding of waves, energy, momentum, angular momentum, and electromagnetism.

Biography-

Brief CV: John Terning is a Professor of Physics at UC Davis. He received his Ph.D. at the University of Toronto in 1990 and has done postdoctoral research at Yale, Boston University, the University of California, Berkeley, and Harvard. He was a staff member at Los Alamos National Lab from 2001 to 2004. He is also the author of a graduate textbook on supersymmetry. His research is focused on electroweak symmetry breaking.

Publications: None