

Title: The Particle World**Lecturer: Tara Shears****Date and Times: Tuesday June 30th 10:15 and 11:15, Wednesday July 1st 9.15.****Summary of the proposed lectures:**

The Particle World: an introduction to particle physics. These three lectures provide an overview of the subject – from an overview of what we study, to matter and forces and Higgs and the Standard Model theory that describes their behaviour, to our experiments, and finally the big questions that our research is focussed towards answering.

Note that this will be a very brief introduction! It is intended to provide context for the lectures that follow.

Prerequisite knowledge and references:

No prior knowledge of particle physics assumed. References: there are many good books about particle physics available in the CERN library. Try Frank Close's "Particle Physics; a very short introduction" if you haven't studied particle physics before.

Biography**Brief CV:**

1995: PhD in particle physics (measuring B lifetimes with the OPAL experiment)

1995---1999: PPARC Postdoctoral and CERN fellowships on the OPAL and ATLAS experiments

2000 – 2007: Royal Society University Research Fellowship on the CDF experiment

2007 – 2009: Lecturer, University of Liverpool (LHCb experiment)

2009 – 2012: Reader, University of Liverpool

2012 onwards: Professor of particle physics, University of Liverpool. Head of Liverpool LHCb group.

Publications:

http://inspirehep.net/search?ln=de&p=find+a+shears,t&of=hb&action_search=Suchen