

Festival of Physics

Saturday 1 March 2008 - 10:00am – 4:00pm

Redland Green School, Redland Court Road, Bristol, BS6 7EH

The day is free to members and non-members (including lunch and refreshments), but please help us to organise catering by booking in advance. No advance booking = no free lunch!

Contact: Dr. Peter Ford - tel: 01225 422503 - e-mail: pyspjf@bath.ac.uk.

Talks and demonstrations are also suitable for school physics students from year 11 onwards

Programme: (see <http://sw.iop.org> for last minute changes)

10:00 – 10:30 Arrival and welcome. Coffee & biscuits

10:30 – 11:20 Into the Heart of Matter

Talk by Dr Helen Heath, University of Bristol

The Large Hadron Collider (LHC) at CERN is due to see first collisions in Summer 2008. At the energies produced we must see signs of new Physics - possibly the Higgs boson or supersymmetric particles. The next few years should be an exciting time in the field of particle physics. I will introduce our current understanding, with some audience participation and some brightly coloured hats. I'll then show the progress of one experiment for the LHC which I have been working on for over 10 years.

11:30 – 12:20 How does the Sun Work?

Talk by Dr Vincent Smith MBE, University of Bristol

I review ideas about what provides the energy that keeps the Sun shining, from early days up to the present. Is the Sun still shining? This was in doubt for part of the last century. I describe how measurements of neutrinos from the Sun can reassure us. Finally I look at 'weather' on the Sun.

12:30 – 1:15 Buffet Lunch (*please book in advance: it is free!*)

During lunch there will be physics demonstrations

1:15 – 2:45 Branch AGM - To include News from IoP HQ

For agenda of the AGM see our February Newsletter, or <sw.iop.org>

3:00 – 3:50 Intelligent Robots: Current Reality and Future Possibilities

Talk by Prof Alan Winfield, University of the West of England

Intelligent Robots are becoming ubiquitous: we're used to the idea of robots exploring Mars and, closer to home, we now have robot vacuum cleaners, robot pets and robot Lego. But these robots are very different from the fantasy robots we see in the movies. This talk will explore the amazing reality of intelligent robots, illustrated with real examples from current research in the Bristol Robotics lab, and speculate about the future possibilities of robots in society from both technical and ethical perspectives.

4:00 Close

Directions:- The school has ample parking. For a map, type the postcode into <streetmap.co.uk>
For those using public transport, take bus no. 9 from Temple Meads Station, and alight one stop after Redland Station.