

PHYSICS TEACHERS' CONFERENCE

Teaching Physics - a day for everyone

22 June 2012 | University of Exeter, St Luke's Campus

Programme:

- 9.30 Registration, tea and coffee
- 9.45 Welcome and introductions
- 10.00 Lecture 1: *Warping Electromagnetic Space – the QUEST for invisibility and beyond*
by Dr. Alastair Hibbins (School of Physics, University of Exeter)
- 11.00 Tea and coffee
- 11.15 Workshop 1: You may attend two workshops from a choice of four
All workshops are repeated twice in the day, see online for details
- 12.30 Lunch
- 13.30 Workshop 2: You may attend two workshops from a choice of four
All workshops are repeated twice in the day, see online for details
- 14.45 Lecture 2: *Hands-on Astrophysics*
by Dr. Jennifer Hatchell (School of Physics, University of Exeter)
- 15.45 Close and evaluation, tea and coffee

Lectures

Warping Electromagnetic Space – the QUEST for invisibility and beyond

Dr. Alastair Hibbins, School of Physics, University of Exeter

There has been great interest in recent years surrounding the ability to manipulate electromagnetic radiation using so called “meta-materials”. These materials have properties that do not exist naturally, and when tuned and arranged appropriately, can result in extraordinary phenomena including negative refraction, perfect imaging and even invisibility. I will summarise some of the principles behind the discoveries in this field, and discuss how our researchers at Exeter are pioneering the latest advancements.

Hands-on Astrophysics

Dr. Jennifer Hatchell, School of Physics, University of Exeter

Astrophysicists typically research objects which are huge, massive and unimaginably distant. This can make astronomy a good subject for mathematicians practising their exponential notation but difficult to link to everyday physics in the school lab. In this talk, I will show some demonstrations developed at the University of Exeter which shrink astrophysics down to lab scale, enable hands-on learners to (literally) grasp the subject, and illustrate some fundamental physical concepts in the process.

Booking information

There is no charge for this event. For full details and to book online see www.slcs.ac.uk/go/sw/swc11375. Alternatively contact the Science Learning Centre South West on 0117 9157257 or email info@slcsw.org.uk.



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