Information

All our lectures are free to all and last about one hour. There is usually 10 to 15 minutes afterwards for the audience to ask questions. School parties are most welcome but please register numbers beforehand with the relevant venue organiser (see below). All venues are wheelchair accessible. Details herein are subject to possible alteration – check branch webpages. Any views expressed in here are not necessarily those of the Institute of Physics.

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Venues and timings

Berkshire
Please see website for details of lectures.
Lectures held at 7.30pm in the William Penny Theatre, Recreational Society, West Gate, AWE, Aldermaston, Reading RG7 4PR. The theatre entrance can be found on the A340 Basingstoke to Newbury Road, just before the Heath End Roundabout at Tadley. Do not use the main gate entrance; the correct gate is signposted as the West Gate or AWE Staff + Deliveries
For further information email iop.lectures@awe.co.uk

Herts
Lectures usually held at 7pm in the Lindop Building, University of Hertfordshire, College Lane, Hatfield AL10 9AB.
To book a place or for further information on this season’s events please contact:
Dr Diane Crann
Email d.crann@herts.ac.uk
Tel 07770 444614

London
At time of printing it is assumed that all London centre lectures will be held at 6.30pm, Franklin Room, Institute of Physics HQ, 80 Portland Place, London W1B 1NT. Refreshments are served from 6pm on the day of the lecture. Please register online to attend lectures. Please check the branch website and events calendar regularly for an update on when talks and events will move to the new IOP building near King’s Cross.

Milton Keynes
Lectures held at 7.30pm in the Berrill Lecture Theatre, The Open University, Walton Hall, Milton Keynes MK7 6AA.
There is no need to register. For further information contact:
Prof. Ray Mackintosh
Email raymond.mackintosh@open.ac.uk

Oxford
Lectures held at 6.45pm in the Martin Wood Lecture Theatre, Clarendon Laboratory, Parks Road, University of Oxford OX1 3PU, email iop.oxford@outlook.com
Refreshments are served from 6.30pm. Please register online to attend lectures.

December 2018

Herts ● Wednesday 5 December ● 7pm
The Role of Drones and Satellites in Land Use and Precision Agriculture
Dr Toby Waine, Cranfield University
Dr Waine will explore how science and technology is revolutionising agricultural engineering with a particular focus on remote sensing from space and drones. From measuring illicit opium production in Afghanistan to undertaking national assessments of vegetation in semi-arid climates, innovative use of remote sensing supports operational methods for vegetation monitoring and provides robust, statistically-based area estimates of land cover and net primary production.

Milton Keynes ● Tuesday 11 December ● 7.30pm
Recreating the Big Bang with the World’s Largest Machine – the LHC at CERN
Prof. David Evans, University of Birmingham
The Large Hadron Collider is the world’s most powerful particle accelerator. Protons are smashed together at 0.999,999,991 times the speed of light recreating the violent particle collisions that would have existed less than a billionth of a second after the Big Bang. The physics behind the LHC will be explained.

London ● Wednesday 12 December ● 6.30pm
Will the Coming Tech Revolution be a Force for Good?
Stephen Pattison, ARM Holdings
A new age of technology is fast approaching. But there are many concerns: Will cyber criminals ransack our bank account? Will robots take our jobs? Will hostile intelligence agencies undermine our politics and flood us with fake news? Stephen Pattison will consider these issues in the context both of what cutting-edge technology can do to help mitigate some of the risks, and what will require a wider policy debate about the ethics of some of the possibilities that the technology will create. His starting point is that the new technology can deliver huge benefits for us: but for those benefits to be realised, we need to have confidence in it. If the internet of things doesn’t empower people, it will fail.

January 2019

REMS at Home ● Thursday 17 January 2019
Big Data and Artificial Intelligence
Please see the website for further details.
New Views of the Low-Frequency Radio Sky
Prof. Alan Davies, University of Hertfordshire

Soap Films and Bubbles
Herts • Wednesday 10 October • 7pm
Prof. Alan Davies, University of Hertfordshire

The early days of radio astronomy revealed the existence of exotic galaxies producing powerful jets of material travelling immense distances at close to the speed of light. We still have many questions about how these jets are generated by matter falling onto a central black hole, what the jets are made of, and, perhaps most importantly, how they impact their surrounding galaxies and intergalactic space. I will discuss the origin of galactic and intergalactic magnetic fields is one of the greatest mysteries facing contemporary astronomy. Meinecke and her team are using the largest laser on Earth, the National Ignition Facility, to explain the origins and evolution of magnetic fields by recreating scaled astrophysical events such as supernovas.

Hertford • Wednesday 7 November • 7pm
Astronomy and Art: Universal Appeal?
Prof. Andrew Newsam, Liverpool John Moores University

For centuries, science and art went hand in hand, but more recently they seem to have diverged into two distinct “cultures”. However, they still have much to gain from each other and in this talk, Andrew will describe some forays by an astronomer into the world of art to try to explore challenging concepts with unsuspecting audiences. From computer music to dance, theatre to gardening shows, and exploring science from gravity and the nature of dark matter, to the physics of breakfast, we will see some ways in which art and science can work together, and also perhaps ask whether the two cultures are really as different as they might at first seem.

All free, all welcome! Join our Facebook group facebook.com/ioplse