

BOOKINGS OPEN 14 APRIL 2017

19 MAY 2017, 7.00pm – audience 12+



A Talk from the Future: Artificial Intelligence in the Year 2040

Peter Bentley, University College London and Braintree Ltd

Computer Scientist Peter Bentley returns from the year 2040 and tells us what it is like in the future. He explains how computers with Artificial Intelligence help us in many aspects of our lives, from self-driving cars and robot teachers, to personal assistants in our homes. He also shows some of the problems that people have faced with the AIs and how human society has changed in response.

Eat My Science!

See synopsis inside



BOOKINGS OPEN 12 MAY 2017

16 JUNE 2017, 7.00pm – audience 15+



Seeing cancer before it's cancer: Illuminating the way with ALICE by seeing the invisible

Dr Michele Siggel-King, University of Liverpool and ASTeC STFC

This talk is an introduction to the trailblazing work on cancer research at Daresbury Laboratory. The work is aimed at the development of new ways to spot early signs of cancer. In particular, for cancers such as in the lower oesophagus, which are very difficult to detect at an early stage in their development. This research uses ALICE, a state-of-the-art particle accelerator at Daresbury Laboratory, that delivers high-intensity infrared light from advanced laser technology. This light gives the fingerprint of cancer and is used to image human cancer tissue and cells. The project brings together scientists with expertise in physics, biology, chemistry, and accelerators, not to mention medical doctors.

All events take place in the Merrison lecture theatre at Daresbury Laboratory. Visit our website for travel information.

A hearing loop is installed in the lecture theatre and disabled access is available. Please let us know when you book if you require us to make any adjustments for your visit. Children under 16 must be accompanied by a responsible adult. Once your booking is made, you will receive a confirmation by email.

The programme is subject to change therefore please refer to the Daresbury Talking Science website for potential updates.

Science and Technology Facilities Council, Daresbury Laboratory, Daresbury Science and Innovation Campus, Daresbury, Warrington, Cheshire WA4 4AD.

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Science & Technology
Facilities Council

Booking is essential:

Book online

www.stfc.ac.uk/dltalkingscience

Email dltalkingscience@stfc.ac.uk

Or call **01925 603040** (24 hour answerphone)

Graphic Design by Andy Collins STFC

Talking Science

Daresbury Laboratory

FREE stimulating talks on science, maths and the Universe, for families, public and schools



Talking Science
Series 2016-17

BOOKINGS OPEN 3 AUGUST 2016

7 SEPTEMBER 2016, 7.00pm – audience all ages

Mersey Gateway Bridge, From Planning to Construction

Paul Fenwick, Construction Director
Alan Segrott, Project Bridge Engineer

The Mersey Gateway Bridge is a £1.8 billion infrastructure project that includes a landmark 3 tower cable stay bridge. This lecture will explain the development of the project, and will describe the design philosophies and the construction processes being employed to deliver this technically challenging mega project.



BOOKINGS OPEN 19 AUGUST 2016

23 SEPTEMBER 2016, 7.00pm – audience 14+

A is for Arsenic: The Poisons of Agatha Christie

Dr Kathryn Harkup, freelance science communicator and writer.

No one has used more poisons, more often and more accurately than Dame Agatha Christie in her classic crime novels. Her toxic tally totals over thirty different compounds which she used to bump off over 100 characters. The Queen of Crime may have been writing fiction but it wasn't all made up. Chemist and author Kathryn Harkup will explore the science and history of just a few of Christie's killer compounds. Expect country houses, red-herrings, chemical clues and magnificent moustaches.



BOOKINGS OPEN 16 SEPTEMBER 2016

21 OCTOBER 2016, 7.00 pm – audience all ages

Tales from Television: bringing the natural world to your living room.

Dr George McGavin, Oxford University

Since leaving the world of academia, I have had the chance to travel the globe to meet all manner of wonderful animals on a number of filming trips with the BBC. Being able to share my passion for wildlife with a large audience is a great privilege. New camera technology can help make stunning footage for natural history programmes but the key to success is down to a lot of hard work, planning and a bit of luck. In this lecture we take a 'behind the scenes' look at some of the highs and lows of working in the field.



BOOKINGS OPEN 21 OCTOBER 2016

25 NOVEMBER 2016, 7.00pm – audience 14+

The Square Kilometre Array – the future of radio astronomy

Prof Keith Grainge, The University of Manchester

The Square Kilometre Array (SKA) will be the world's largest and most sensitive radio telescope. It will address fundamental unanswered questions about our Universe including how the first stars and galaxies formed after the Big Bang, how the mysterious "dark energy" is accelerating the expansion of the Universe, the role of magnetism in the cosmos, the nature of gravity, and the search for life beyond Earth. The SKA will be a huge industrial project and in particular will be an exemplar Big Data project, with very challenging data transport and data processing requirements.



BOOKINGS OPEN 4 NOVEMBER 2016

9 DECEMBER 2016, 7.00pm – audience 10+

Why don't bats get fresher's flu?

Dr Tom August, Centre for Ecology and Hydrology

Bats are one of the most charismatic groups of mammals in the world. With over 1,200 species, the ability to see in complete darkness, and a diet ranging from fruit and frogs to blood and birds, bats are both fascinating and key for a healthy planet. Tom will give a whistle stop tour of bats, covering the 'bat basics', his own research into bats' social behaviour as well as how you can explore the ultrasonic world that bats live in.



BOOKINGS OPEN 16 DECEMBER 2016

20 JANUARY 2017, 7.00pm – audience 6+

Alder Hey: the world's first living hospital

Mr Iain Hennessey, Alder Hey Children's Hospital

How do you bring a hospital to life? Using a mixture of artificial intelligence, sensor technology and gaming, Alder Hey is on a 20 year journey to create the world's first living hospital. Working with partners such as the STFC, IBM, Sony and a huge array of small companies, the innovation team are creating the technologies that can make this ambition a reality.



BOOKINGS OPEN 13 JANUARY 2017

17 FEBRUARY 2017, 1.00pm – audience 7+

Eat My Science!

Stefan Gates. TV writer, presenter and author

The BBC's Stefan Gates (Incredible Edibles, Food Factory, Cooking in the Danger Zone) takes you on an explosive, stomach-churning adventure through the amazing chemistry, physics and biology of your food. There'll be some extraordinary sensory perception adventures, food rockets, flavour cannons, edible insects and culinary flame throwing, as well as lots of audience participation and the opportunity to taste some extraordinary foods. All in the name of science, you understand. Leave your hang-ups at the door: this could get messy.



BOOKINGS OPEN 2 FEBRUARY 2017

9 MARCH 2017, 7.00pm – audience 14+

Space rocks on ice: Hunting for meteorites in Antarctica

Dr Katherine Joy, University of Manchester

Meteorites shed light on the origin of the Solar System and on the geological history of different planetary bodies. Antarctica is unique collection ground for meteorites – it is very cold so preserves them well, the black meteorites are easy to spot against the white ice, and meteorites samples are often concentrated together on the ice along the Transantarctic mountain range. I will outline my experience in travelling to collect meteorites with the US Antarctic Search for Meteorites Programme, and talk about the scientific reasons we go and collect these stones from space.



BOOKINGS OPEN 17 MARCH 2017

21 APRIL 2017, 6.00pm – audience 7+

Weird Creatures

Nick Baker, Naturalist and Television Presenter

Learn about the Baggly Frog from Lake Titicaca, the Olm from Slovenia and the little known Fluffy.

In this exciting live show, Nick tells his personal journey of how he has travelled the world over in search of weird and wonderful creatures and of the trials and tribulations he has faced being an obsessed naturalist.

This family friendly live show is based on the popular TV series *Weird Creatures* on Animal Planet channel. Along with some revealing 'behind the scenes' moments of filming wild and weird creatures Nick will also explain why some animals appear weird to us and how their strange looks and habits are actually born of an evolutionary need to tackle some unique habitats and situations.



PTO for more