



# Talking Science

## Daresbury Laboratory

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

BOOKINGS OPEN 13 MAY 2016

17 JUNE 2016, 7.00pm – audience 13+

### Ever Wanted to be a DJ?

*Dr Martin Archer*

Space Plasma Physicist and Kiss FM DJ Martin Archer takes you on a journey into sound with his virtual DJ booth, covering waves, frequency and other basic principles. Whilst spinning the latest tunes he explains the science behind the cueing, beat matching, blending and EQing that goes into his mixes in clubs. Along the way he'll make a speaker out of a Styrofoam bowl, turn sound into fire and guide you fearlessly through uncharted frequency space, where you'll discover some surprising connections to seemingly unrelated, cutting-edge physics research.



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 or by phone, we do not produce hard copy tickets.

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](http://www.stfc.ac.uk/dltalkingscience)

Email [dltalkingscience@stfc.ac.uk](mailto:dltalkingscience@stfc.ac.uk)

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

Graphic Design by Andy Collins STFC

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Did you know that if cars had developed at the same rate as computers you would be able to buy a Rolls-Royce for a penny and travel to the moon and back on a thimbleful of fuel?

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*Dr Mike Ashworth,  
STFC Daresbury Laboratory*

Talking Science  
Series 2015-16

BOOKINGS OPEN 21 AUGUST 2015

25 SEPTEMBER 2015, 7.00pm – audience 16+

### Seeing the invisible

Prof. Themis Bowcock, University of Liverpool



This talk aims to explain the discoveries and the motivations behind the next generation of physics experiments that link together the very largest, cosmological question, the nature of space and time as well as the new and undiscovered particles that we postulate exist. I will give examples of a new generation of precision experiments that can probe beyond the energies achievable at the Large Hadron Collider at CERN. We now believe that over 90% of all matter and energy is non-luminous and probing this "dark universe" is a major theme for science. I will look at why this is so exciting.

BOOKINGS OPEN 18 SEPTEMBER 2015

23 OCTOBER 2015, 7.00 pm – audience 14+

### Boulby Mine: Deep underground Science

Prof. Sean Paling, Director, Senior Scientist Boulby Underground Science Facility



'The race is on to find out exactly what 'DARK MATTER' - the missing mass in the universe is. For more than a decade UK astrophysicists have been operating experiments in a dedicated 'low background' facility, 1.1km below ground at Boulby potash mine in the North East of England. This talk will give an overview of the Boulby Deep Underground Science Facility, the science currently supported and plans for science at Boulby in the future. It is open to all - no prior expertise in astrophysics or deep underground science is required...

BOOKINGS OPEN 16 OCTOBER 2015

20 NOVEMBER 2015, 7.00pm – audience 12+

### Stem cell science

Fiona M. Watt, King's College London



These cells are able to generate the specialised cells that maintain the function of our tissues. There is considerable optimism that this property of stem cells could be harnessed to repair tissues that have been damaged by age or disease. In my lecture I will discuss the strategies that scientists are taking to make this possibility a reality.

BOOKINGS OPEN 30 OCTOBER 2015

4 DECEMBER 2015, 7.00pm – audience 12+

### Sir Isaac Remembers...

Prof. Michael Geoffrey Edmunds, Cardiff University



Sir Isaac Newton is sorting out his letters during the last year of his life. This dramatic reconstruction, lasting about one hour, is Sir Isaac offers thoughts on his science, his life, his lesser-known studies in alchemy and religion and the world in general ...

BOOKINGS OPEN 10 DECEMBER 2015

14 JANUARY 2016, 7.00pm – audience 12+

### Imaging Comet 67P/Churyumov Gerasimenko from Rosetta

Dr Stephen Lowry, University of Kent



The European Space Agency's Rosetta spacecraft has been studying comet 67P/Churyumov-Gerasimenko up close for over a year. The images sent back from the OSIRIS optical camera instrument on board the orbiter have revealed a striking and bizarre world. Dr. Lowry will summarize the latest findings from the mission with emphasis on the imaging data from OSIRIS, and will also discuss what we still hope to learn as the probe continues to escort the comet around the Sun.

BOOKINGS OPEN 14 JANUARY 2016

18 FEBRUARY 2016, 1.00pm – audience 6+

### Big Bang!

Dr Roberto Trotta, Imperial College London



In this unconventional, fun-packed lecture award-winning science communicator and astrophysicist Dr Roberto Trotta will take you to the furthest reaches of the Universe, and to the frontiers of knowledge! Where did the Big Bang happen? What are dark matter and dark energy? And what does it feel to be sucked into a black hole? Come along to experience the answer to all of those fascinating questions in a hands-on fashion.

BOOKINGS OPEN 1 FEBRUARY 2016

7 MARCH 2016, 7.00pm – audience 12+

### A Cameraman's Perspective on Climate Change

Dr Doug Allan, Freelance Documentary Cameraman



Doug's been visiting the poles every year since he first wintered in Antarctica as a diver and scientist in 1976. Then when he started making films, he had the chance to see the Arctic before it all started changing. Now his bears are disappearing and his penguins are moving further south. Come along and find out just what's happening and why, and how he couldn't do some of his films without the best scientists in the world at his side.

BOOKINGS OPEN 2 MARCH 2016

6 APRIL 2016, 2.30pm – audience 5+

### Dinosaurs from Top to Bottom

Mike Walley, Everything Dinosaur



Come and explore all things dinosaur with Everything Dinosaur. A whizz through the latest prehistoric animal discoveries with "dinosaur Mike". Talking Triceratops, T.rex tummies and disgusting dinosaur digestion!

BOOKINGS OPEN 18 MARCH 2016

22 APRIL 2016, 7.00pm – audience 12+

### Supercomputers: The biggest, fastest computers in the world!

Dr Mike Ashworth, STFC Daresbury Laboratory



At Daresbury Laboratory we have one of the fastest computers in Europe, containing nearly 100,000 processors. Supercomputers like this one are used around the world to help scientists in their research and to help industry create better products. Many everyday products have been designed using supercomputers, from cars and aeroplanes to shampoo and Pringles crisps! In this lecture we will take a wide-ranging look at supercomputers, answering questions like: What makes them tick? What is the history of supercomputers? What are they used for? And the big question ... what can we expect from computers in the future?

BOOKINGS OPEN 14 APRIL 2016

19 MAY 2016, 7.00pm – audience all ages

### Finding Richard III: The Grey Friars project

Turi King, University of Leicester



When the University of Leicester Archaeology Service undertook the Grey Friars project, it was thought the chances of finding the remains of Richard III were slim to none. Join us to learn about the Grey Friars project, from the early stages of planning the dig, through to the excavation and the results of the various strands of analysis carried out on the remains.



FAMILY SHOW

CONTINUED OVERLEAF