



Keele Physics Centre: Evening Lecture Programme 2022-23

15th September 2022



Dr Fabrice Laussy
University of Wolverhampton

Eratosthenes

Eratosthenes, who, contemplating a mere shadow, worked out with uncanny accuracy the size of Earth. This talk will discuss the recreation of his experiment and the myths and reality of the results. It will be presented, in character, by students from the University of Wolverhampton.

26th January 2023



Dr Kate Lancaster
University of York

Is it Possible to Build a Star on Earth

Trying to recreate the energy source of the stars, nuclear fusion, on earth presents huge challenges in physics and engineering. This talk is the story of how, in the absence of a lab the size of a star, we are attempting to make fusion into an energy source for the future.

16th February 2023



Dr Ronald S Gamble Jr
NASA Goddard Space Flight Centre

The Nature of Cosmic Geometry

Over the last several decades there have been numerous results and discoveries in the observations of black holes. From the abstract genesis of the General Theory of Relativity by Albert Einstein to the most recent observations by the Event Horizon Telescope, we have seen the dynamic nature of black holes, their interaction with matter, and their influence on the geometry of spacetime.

This talk will provide an overview of the intricacies and the interplay between black holes and the motion of matter-energy with respect to the local structure of spacetime that surrounds them. A general description of the structure of spacetime surrounding a rotating black hole will also be provided.

16th March 2023



Dr Tianning Xu
ChargePoint

Electric Vehicle Charging

The electrification in this world is being accelerated due to obvious environmental reasons and electric mobility is an important contributor for this transition. To make this happen, it is essential to have an equivalent penetration of electric vehicle (EV) chargers so the infrastructure is there to support the growth. Also, it is important to offer the best EV charging experience for the drivers as well as asset management solution for the owners.

In this talk, Tianning Xu, the Director of Engineering from ChargePoint, a leading electric mobility charging solution provider in the market, will explain how and why EV charging is playing a critical role in this transformation as well as outlining the challenges ahead including the implication on the grid/vehicles.

20th April 2023



Dr John Mansfield
University of Michigan

Micro-characterisation Applications of Cultural Artifacts

Abstract to follow

Coming soon



Prof Ed Daw
University of Sheffield

Quantum Sensors for the Hidden sector (QSHS)

Date and abstract to follow



Venue



LJ1.75
Lennard-Jones Laboratories
Keele University
ST5 5BG

Tea and coffee is available from 6pm in the Lennard-Jones foyer. Talks start at 7pm and are followed by Q&A.

These talks are open to the public and are sponsored by the IOP West Midlands branch.

There is ample car parking space on campus which is free during the evening.

There may also be several additional lectures added to this series after this programme is published. Please check www.iop.org/events for the latest information.

In order to improve accessibility, all our talks within this programme will be accompanied by a British Sign Language interpreter.

