



# Wolverhampton Physics Centre: Evening Lecture Programme 2022-23

13 October 2022

Prof Fabrice Laussy  
University of Wolverhampton



## The Nobel Prize in Physics

The Nobel Prize is synonymous with the most prestigious award that can be bestowed upon human endeavours to serve and advance humanity. This talk covers, in layman's terms, the science honoured this year, including the crunchiest bits of this socio-scientific celebration.

24 November 2022

Prof Natalia Berloff  
University of Cambridge



## Making Light to Compute

Research in quantum computing has inspired the development of promising new algorithmic and hardware techniques that avoid the hardest technical challenges facing quantum computing. This talk will discuss the principles of the operation of the devices based on such systems, and the challenges they present, with a particular focus on polariton graph simulators.

15 December 2022

Prof Alexey Kavokin  
Westlake University, Zhejiang, China



## Physics on a Möbius Strip

The Möbius strip is topological magic on the table: twist a piece of paper and attach it to itself and you get a non-orientable surface with no notion of clockwise and counter-clockwise! If you think you understand quantum mechanics, come and see if you understand it on the Möbius strip.

12 January 2023

Dr Elena del Valle  
Universidad Autonoma de Madrid



## Music and Noise

What distinguishes music from noise? This talk will cover the physics of music and explore unsuspected corners of this intemporal human practice, showing us a way to their possible happy encounter with the modern concept of noise music.

23 February 2023

Dr Tom Taylor  
Molten Energy



## The Physics of Advanced Nuclear Reactors

This talk will describe some of the pros and cons of nuclear—to help you judge nuclear power relative to the other options for reaching net zero.

16 March 2023

Dr Evgenia Chertochenko  
Ioffe Physical Technical Institute



## Physics Olympiads and How to Train a Genius

The International Physics Olympiad branched from its somewhat more famous and acknowledged mathematical ancestor. Just like the latter, the physics olympiads helped to recognise and develop countless talents and brought many geniuses into the world of physics research.

20 April 2023

Dr Martin Khechara & the STEM Response Team  
University of Wolverhampton



## Dangerous Experiments in Physics

This talk will give an overview of some of the most dangerously mad experiments ever performed and will actually proceed to bring some of them on stage in a fight against electricity, radioactivity, gravity, chemistry, light and matte.

11 May 2023

Prof Konstantinos Nikolopoulos  
University of Birmingham



## In Search for the Origin of Mass

Professor Nikolopoulos, one of the physicists who discovered the Higgs boson, will discuss the origin of mass in the universe and what we currently know about dark matter.

Venue

Wulfruna Building  
University of Wolverhampton  
City Campus  
Wulfruna Street  
Wolverhampton WV1 1LY



Talks start at 5 pm and are followed by a Q&A session.

These talks are free and open to all. They are sponsored by the IOP West Midlands branch.

There may also be several additional lectures added to this series after this programme is published. Please check [www.iop.org/events](http://www.iop.org/events) for the latest information and for fuller details on these events.

