

DEC  
13  
2019

## Physics in Action

For A level and IB students

Five sessions of phenomenal physics will be brought to you by the brightest lights in the field in 2019. Join us for a day full of inspiration, challenge and experimentation across the breadth of physics. A special session on examination success will provide students with the tools to excel. We look forward to welcoming you to Physics in Action this year!

- The SI redefined
- The physics of smart buildings
- Exploring the invisible universe
- Strange ice
- Electrifying the voice



Emmanuel Centre, London  
9 – 23 Marsham Street  
London, SW1P 3DW



£23 + VAT\*

Plus one COMPLIMENTARY staff ticket per 10 students. \*VAT may be reclaimable please check with your finance department

ttp is the leading provider of inspirational, informative, Education in Action study days for A-level, IB, BTEC and GCSE students.

Award-winning, world-class speakers

Cutting-edge content

Thought-provoking demos and presentations

Examination hints, tips and guidance

Modestly priced to offer access to all

Complimentary staff ticket for every 10 students booked

**Bookings can be amended up to 28 days before the event day**



Education  
in ACTION

DEC  
13  
2019

# Physics in ACTION

## The SI redefined / Michael de Podesta



2019 sees changes to the definitions of the kilogram, ampere, kelvin and mole, four of the seven 'SI' units. Michael explains these changes and why, even though you probably didn't even notice anything, you should be happy about them.

Michael's research interests concern all aspects of temperature measurement. Michael is a chartered physicist, a member of the Institute of Physics, and received an MBE for Services to Science



## Strange ice / Andrea Sella



Building physics employs creative ways to manipulate a building's indoor and outdoor environment to influence its performance. Ozak introduces the basics of building physics and the application of smart electronics and technology to improve operational efficiencies.

Andrea is a synthetic chemist and broadcaster who is interested in the structure and bonding in the rare earths. He has been involved in numerous radio and television projects.



## The physics of smart buildings / Ozak Esu



Ozak is the Technical Lead in Smart Buildings at The Centre for Smart Homes and Buildings. She arrived the UK from Nigeria at 17 to study for a degree and

Ozak is the Technical Lead in Smart Buildings at The Centre for Smart Homes and Buildings. She arrived the UK from Nigeria at 17 to study for a degree and



## Electrifying the voice / Trevor Cox



How does the voice work and how has it been changed by technology? Drawing on examples from opera to hip-hop, Trevor shows how physics, psychology and neuroscience can help explain diverse singing styles.

Trevor Cox is Professor of Acoustic Engineering at Salford University where he teaches and researches room acoustics and audio.



## Exploring the invisible universe / Jen Gupta



We see only a tiny fraction of all there is in our possibly-infinite universe. Jen will look at the universe in different wavelengths across the electromagnetic spectrum, and explore some

Jen Gupta is an astrophysicist who loves to talk about how awesome space is with anyone who will listen!



## The Training Partnership

Gilmoora House | 57-61 Mortimer Street | London W1W 8HS  
020 3008 6441 | office@thetrainingpartnership.org.uk  
[www.thetrainingpartnership.org.uk](http://www.thetrainingpartnership.org.uk)