

# Physics in ACTION

NOV  
21  
2023

## Physics in Action

For A level and IB students

Join us for an exciting day of informative discussions, interactive sessions and inspirational stories that will give your students real insight into the world of physics beyond the classroom. Our experienced speakers are keen to share their expertise on a wide range of topics, from quantum computing to planetary science.

The day will also include a special session on examination success designed to provide students with the tools that they need to excel. With polls and quizzes throughout the day and plenty of opportunities to ask the scientists questions, this event is a must for KS5 physics students! Book now for Physics in Action!

Host: Anna Ploszajski (*Materials Scientist, Writer and Storyteller*)

- The quantum computing race
- Baking in Space: when engineering meets desserts
- The Accidental Materials Scientist
- Everyday Fluid Dynamics
- A Solar Symphony: Unearthing the secret vibrations of our Sun



King's House Conference Centre,  
Manchester,  
Manchester,  
M1 7HB



**Venue: £22 +VAT \***

Plus one COMPLIMENTARY staff ticket per 10 students.

\*VAT may be reclaimable. Please check with your finance department

Education in Action 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

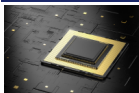
**Bookings can be amended up to 28 days before the event day**

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## The quantum computing race /

Nic Harrigan – Physicist, PsiQuantum



Computing forever changed what we are capable of as a species: from arguing across the world, to making Harry Potter fashionable. But equally important applications remain fundamentally impossible for traditional computers. I will explain how quantum computers can change this, and how teams from every corner of the planet are racing to build one.

With over 15 years exploring the mysteries of quantum mechanics and quantum computing, Nic is only a little less confused than he used to be... Along the way he's become adept at explaining the bizarre finer details, and how they might help find solutions to otherwise impossible problems.



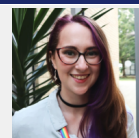
## Everyday Fluid Dynamics /

Kat Phillips – University of Bath



Welcome to the wonderfully wacky world of fluid dynamics. Using everyday examples, Kat will introduce the equations that govern all fluid motion, and show how a small change in a mathematical equation can describe a huge range of different fluid phenomena.

Kat is a PhD Student at the University of Bath studying fluid dynamics. When she's not doing her research, you can find her promoting maths on twitch, and having conversations about the role of STEM in the everyday life.



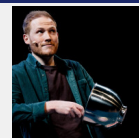
## Baking in Space: when engineering meets desserts /

Andrew Smyth – Aerospace Engineer and Broadcaster



How can a retro dessert explain how spacecraft safely returns to earth? In this talk, Andrew will explore the curious connections between his career in cutting-edge Aerospace Engineering and the world of baking.

Andrew is an aerospace engineer, presenter and baker on a mission to whisk up curiosity about engineering through edible means. He is the Executive Producer & judge on Netflix's Baking Impossible and was a finalist on The Great British Bake Off.



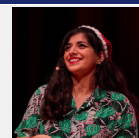
## A Solar Symphony: Unearthing the secret vibrations of our Sun /

Tishtrya Mehta – University of Warwick



Helioseismology, the science of Earthquakes on the Sun, allows us to look inside our Sun and other stars. Using Doppler measurements from telescopes that are as big as a planet, we can listen to the captivating melodies of our Sun and other stars. Discover how these celestial dances reveal incredible insights into a stars composition, structure, and evolution.

Tish is an astrophysicist who specialises in helioseismology, the study of the 'music' made by stars like the Sun. She also investigates the subtle variations in star brightness, which could unlock insights into space weather and potential threats from the cosmos.



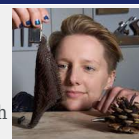
## The Accidental Materials Scientist /

Anna Ploszajski – Materials Scientist, Writer and Storyteller



This is the story of an accidental materials scientist; accidentally studying materials science instead of physics at university, accidentally breaking stuff, accidentally leaving a microscope slide on a shelf for nine months and making a huge accidental discovery. My dad always tells me 'you make your own luck', but what if it all just happened by accident?

Anna Ploszajski is a materials scientist, author, presenter and science comedian who is on a mission to get people fascinated by the ordinary stuff which makes up the world around us. Her book Handmade tells the story of materials through their use in arts and crafts.



## Education in Action

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