

Press release



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Parents an unwitting barrier to children taking physics – survey

New challenge – The Eureka's – launches to get young people to see physics differently

First prize of £1,000, plus runner-up prizes and equipment for schools

Parents who did not enjoy physics at school may be unwittingly putting their children off the subject and could be contributing to the diversity problem faced by the profession. Some 46% of parents describe physics at school as 'complicated', a third say it's 'difficult' and only 17% say it's 'creative', according to results of a survey* of 3,000 parents commissioned by the Institute of Physics (IOP).

Just one in 10 UK parents think physics is 'topical', despite it being vital in tackling some of the world's most pressing issues from food security to climate change. With less than 3% of girls and 8% of boys sitting A-level physics in England**, the IOP is determined to tackle these perceptions and is today launching *The Eureka's* – a new annual competition that aims to inspire 11-16-year-olds to do physics after 16.

Only 18% of the parents surveyed listed physics in the top five most important subjects for their child's future – a particular concern given that 69% said they would influence their child's choice of subjects. The IOP is worried that parents' own negative feelings about physics may be conditioning many children to think that physics isn't for them.

With nearly 9,000 physics-related job vacancies in the UK in mid-2021†, there are significant skills gaps at all levels. Women, people from disadvantaged backgrounds and people of Black Caribbean descent are particularly underrepresented in the physics community – but their talent, insights and perspectives are badly needed if society is to solve the challenges facing healthcare, the environment and the economy.

*The Eureka*s are part of the IOP's Limit Less campaign and aim to inspire students to see physics differently. They are challenged to answer the question: **What's the point of physics?** Whether arty, sporty, musical or into literature and language, all students are encouraged to show how their passions relate to our understanding of everyday physics.

Entries to *The Eureka*s must be submitted online and can be in any form, such as a video, song, or poem, or a piece of art, sculpture or design††. Any student can take part, with group entries strongly encouraged. One winner – or winning group – will receive £1,000 (€1,200) in cash and five runners-up will receive £50 (€60) each. The schools attended by the six prize-winners will also receive a £250 (€300) voucher for equipment. All entries that fit the criteria will receive a digital certificate and selected entries will be distributed and promoted across the IOP's social media channels.

The judging panel will include journalist, broadcaster and physicist Shivani Dave, author and physicist Femi Fadugba and Rachel Youngman, Deputy Chief Executive at the IOP.

Rachel Youngman, said: “Our research suggests that adults are unwittingly perpetuating myths and stereotypes around physics, the careers it can lead to and who should study it. This means the physics world does not reflect wider society and is missing out on some exceptional talent.

“By creating a competition that celebrates creativity, culture, collaboration, diversity and activity, underpinned by physics themes, we hope to engage students early on who previously may not have been interested in physics. We want to show them it's not too late – because no student showing a passion and potential for physics should be made to feel like it's not for them.”

Shivani Dave, said: “The perception that physics is a difficult subject with career prospects solely based in front of a blackboard full with equations is misleading and needs to change. Yes, that is an option, but it can also lead to other exciting and rewarding careers in gaming, F1, tackling climate change, and so much more. Physics teaches us more about the world around us and brings people together to find solutions to the world's most pressing problems. Physics can and should be for everyone and that's why I'm excited to be involved in the first ever *Eureka*s.”

The IOP is hoping to see students interacting with physics creatively and in a way it might not expect. To get started, students could imagine a challenge or issue, whether it's a worldwide problem, or one that

they face day-to-day. They could think about how physics is part of that solution, and work on a submission that explains where they see physics existing in the world around them.

Entries must be in by 31 May. Further information for parents, carers and teachers – including an instruction video from Shivani Dave – is available on [The Eureka website](#).

Ends

For more information, please contact *The Eureka*s team at Barley Communications:

Caroline Narboni: caroline.narboni@barleycommunications.co.uk / 07803 049768

* Censuswide survey of 3,007 parents of children aged 5-16, June-July 2020

** Percentage of students choosing to study physics post-16:

- England: less than 3% of girls and just over 8% of boys (Physics at A-level, 2020)
- Wales: 2% of girls and 9% of boys (Physics at A-level, 2020)
- Northern Ireland: 1% of girls and 3% of boys (Physics at A-level, 2020)
- Scotland: 23% of girls and 77% of boys (Advanced Higher Physics, 2021)
- Republic of Ireland: 4% of girls, and 10% of boys (Leaving Certificate Physics, 2019)

† IOP *Workforce Skills Project*, 2021

†† Information and an instruction video on *The Eureka*s website: <https://theeureka.co.uk/>

About Limit Less

The IOP knows that the physics community does not look like the wider society it is in. There are too few women; too few Black physicists, especially of Black Caribbean descent; too few people with disabilities; too few LGBT+ people; and too few people from less well off or disadvantaged backgrounds. The Limit Less campaign is the IOP's commitment to make a generational change by removing the barriers to young people seeing physics as not for everyone, not for them. More information about the campaign can be found at www.iop.org/LimitLess.

*The Eureka*s – a Limit Less challenge from the IOP.