"Advances personal understanding on subjects as well as providing practical ideas and resources for use in school"

The event includes a day full of activities that can directly benefit your work as a physics teacher, including:

- An opportunity to meet colleagues and find out about the changes in specifications and examinations
- A choice of practical workshops in the afternoon and an opportunity to try out new equipment, including practical demonstrations for the teaching of physics at all levels. We also encourage you to bring any of your own ideas and equipment and share them with colleagues
- An exhibition area with lots of suppliers and bookstalls exhibiting

Mae'r gynhadledd yn cyrwys ddiwydiannau a hwlaf fel alltwch llawer i'ch gwaith fel athrawon fyseg, yn cynnwys:

- Cyfle i gyfrifo cyfleddwyrau a thraddodiad newidiadau a datblygiadau ym symmetric ac anhrefnol
- Dewis o annibyniaeth bywiaeth ymarferol ym y prynhawn ynhŷd a chyflwyno iddoch. Tecynnol hafan yw eich amioni i dddod a unffwy o wybodaeth sy'n rhan o'r rhaglen
- Ardal arddangos gyda nifer o cwmnïau a gwerthwyr llyfrau yn bresennol

Booking is essential, so respond no later than 29 September 2017 to avoid disappointment

To register and for more information, go to https://welshphysicsteachersconference2017.eventbrite.co.uk

Organised by Cerian Angharad, teacher network coordinator, South Wales

For more information please contact cerian.angharad@iop.org

Programme changes

The Institute reserves the right to make alterations to the programme, date and/or venue at any time without prior notice.
A wonderful opportunity for teachers and technicians to take part in a wide variety of physics CPD activities. This free day of workshops is open to all teachers, technicians, newly qualified and trainee teachers.

Workshops/Gwethdaith

The following workshops have all proved to be popular and useful. They are presented by experienced physics teachers and workshop providers. We recommend that you register and select your preferred workshops as the number of places available on certain workshops will be limited.

Workshop A3: WIEC update
Helen Francis, Domains Leader, Mathematics and Science, WIEC
This workshop will provide teachers with an update on the key issues linked to both the new GCSE science and GCSE physics qualifications, alongside demonstrating the new resources that are available.

Workshop A2: Make and take: Plank’s constant
David Grace, Physics Network Coordinator, Institute of Physics
Get to know Plank - this hands on workshop will guide participants through the construction of an LED based circuit that can be used to measure Plank’s Constant. It will involve soldering.

Workshop A3: The Virtual Physics Laboratory
Dr Jess Wade, Imperial College London
In this workshop you will have an opportunity to demonstrate a principle but you don’t have the time to set up the equipment or just don’t have the equipment? Do you need some additional investigations for some of your brighter pupils to do while the rest of the class continues their set work? The Virtual Physics Laboratory has approximately 220 interactive experiments which have been used successfully in the classroom by teachers as well as by pupils individually.

Workshop A4: Maths for Physics GCSE
Dr Lawrence Cattermole, Teaching and Learning Coach, Institute of Physics
This session will use simple explanations, and may include hands on practical work. You’ll learn how the Virtual Physical Laboratory has been used in the classroom and how to use it.

Workshop B1/C1: Science, WJEC
Chris North, Ogden Science Lecturer, STFC
A workshop which looks at different ways of modifying ideas, before designing a mechanism for collecting evidence to show progress for students aged 11-16.

Workshop B2/C2: Energy for Physics GCSE
Dr Lawrence Cattermole, Teaching and Learning Coach, Institute of Physics
This session will use simple explanations, demonstrations and activities to make ideas around energy meaningful. The relationships between the conservation and dissipation of energy, work done, efficiency and power, as well as ways of generating electricity, will all be covered.

Workshop B3/C3: Space Science on Earth
Alessio Benettelli, Physics Network Coordinator, Institute of Physics
In this workshop you will have an opportunity to demonstrate a principle but you don’t have the time to set up the equipment or just don’t have the equipment? Do you need some additional investigations for some of your brighter pupils to do while the rest of the class continues their set work? The Virtual Physics Laboratory has approximately 220 interactive experiments which have been used successfully in the classroom by teachers as well as by pupils individually.

Workshop A1: Einstein’s Universe
Professor Brian Foster, Oxford University and Jack Liebeck (professional violinist)
Einstein’s Universe links Einstein’s favourite instrument, the violin, with atoms and subatomic particles, whose study he pioneered. Brian & Jack explain Einstein’s obsession with the violin and how his ideas have shaped our understanding of the evolution of the Universe. They explore our modern understanding of subatomic physics as carried out at the Large Hadron Collider at CERN in Switzerland. The lecture is punctuated by musical interludes from some of Einstein’s favourite music.

Workshop A2: From Plastic Fantastic: Making my Way with Molecules
David Grace, Physics Network Coordinator, Institute of Physics
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