

St David's Day

Dydd Gŵyl Dewi

St David is the only patron saint in the UK who was born in the country for whom he is the patron saint! St Patrick (Ireland) was born in Wales (or so the story goes), St Andrew (Scotland) was born in Bethsaida (near the Sea of Galilee) and St George (England) was born in Nicomedia (now in Turkey). Also, only Wales claims St David as its patron saint. Most other patron saints are shared between a large number of countries.

There is an exciting exhibition being held in the National Museum Wales from the 23 February to 1 June – [Mars in their Eyes](#). In addition to an exhibition of cartoons on space, Prof Colin Pillinger is giving a presentation on Mars Exploration. For further information see section below in *Events in Wales*.

My explanation of the leap year in February's e-bulletin wasn't very scientific. In the section *IOP in Wales* below is a response I received from a member which explains it in a far more scientific way.

If you have anything that you think you would like covered in the e-bulletin or anything you feel the Institute should be doing this year then please drop me an e-mail (Angharad.Thomas@iop.org).

Happy St David's day to you all

Dydd Gŵyl Dewi Hapus i chi gyd

Angharad

News in Brief

Newyddion yn Fyr

A [Chief Scientific Adviser for Wales](#) has been appointed by the Welsh Assembly Government. Professor Christopher Pollock CBE, former director of the Institute of Grassland and Environmental Research ([IGER](#)) at Aberystwyth was appointed by the First Minister Rhodri Morgan on 18 September 2007 to advise the Government on scientific matters. A petition, submitted by the Royal Society of Chemistry on behalf of the scientific community, was debated on 31 January 2008. Rhodri Morgan has written a [response](#) stating that that Christopher Pollock is the Chief Scientific Adviser for Wales.

It is an exciting time for the International Space Station and for the [European Space Agency](#) (ESA). Following the successful launch and docking of the space shuttle Atlantis, the European Laboratory, Columbus, has been installed. You can watch the NASA control room and hear discussions between the control room and the astronauts on [NASA TV](#). You can also follow the [Columbus mission](#) on the ESA website.

A 71-year old professor of physics at Massachusetts Institute of Technology (MIT) is becoming a phenomenon on the iTunes U chart with a lecture on Work and Mechanical Energy. The lecture includes a spectacular demonstration of the physics of pendulums. At the end of the lecture, the professor swings a 15kg wrecking ball from the ceiling. Resting the wrecking ball just beneath his chin, he explains to his students that because energy is conserved in a closed system the ball cannot swing back higher than the point from which it was released. He lets the ball drop and it swings back, narrowly missing his face. Professor Lewin said, “**Physics works and I’m still alive. See you Wednesday.**” (To view the video please click [here](#) and once you’ve started the video scroll to 45 minutes.)

Institute of Physics in Wales

Sefydliad Ffiseg yng Nghymru

The [National Eisteddfod](#) is in Cardiff this August. I’ve joined forces with Catherine Beddoe (Regional Officer, Wales for the British Association for the Advancement of Science) and we will have an exhibition in the Science and Engineering tent. The theme is cosmology and we are planning to have demonstrations on the planets and on Columbus. The Eisteddfod runs from Saturday 2 August to Saturday 9 August. Any offers of help would be gratefully received – even if you can only spare a morning.

This is the response I received from a member regarding how to calculate when to introduce an extra day - “Re LEAP YEAR, it might be worth reminding members, since we are mainly physicists, that the year is actually 365.2422 days long as the reason for the extra days. Hence the need to add 0.2422 days every year or approx 1 every 4, i.e. 0.25, and then take off 1 every 100 (= 0.01 in the second decimal place), and add approx 1 every 400 for the third and fourth decimal places. So using simple periods, 1 in 4, 1 in 100, and 1 in 400, to keep in step.”

Institute of Physics

Sefydliad Ffiseg

The Institute of Physics actively encourages its members, and others, to communicate exciting aspects and applications of physics to a wide audience. Applications are now being invited for Round 2 of the 2008 [Public Engagement Grant Scheme](#) which is designed to give financial support of up to £1000 to individuals and organisations running physics-based outreach activities during 2008. Application forms and full guidelines for the grant scheme are available online at www.iop.org/activity/outreach/ or by emailing physics.society@iop.org. Applications must be received by 2 May 2008.

A new IOP mentoring service has been launched which allows members to match themselves with other members who wish to be mentored or act as mentors. Registration is online, and initial contact is made via Institute staff. When you have

registered, you will be able to search for an appropriate match, depending on your needs and experience. For more information click [here](#) or e-mail mentoring@iop.org. The Professional Development and Careers teams will be touring the UK to offer you the chance to attend a mentoring workshop and to get involved in mentoring. They are visiting Wales on Thursday 19 June 2008, at the [Royal Hotel](#), Cardiff. Places are on a first come, first served basis. Therefore if you would like to book your place, please click [here](#).

[Forthcoming Institute Conferences](#)

[What's on in Physics](#)

physicsweb events listing which lists [all physics related events](#).

Events in Wales Digwyddiadau yng Nghymru

[Mars in their Eyes](#) – an exhibition of cartoons and caricatures about space is at the National Museum Cardiff between 23 February and 1 June. On Saturday 8 March there is a Family Science Day at the museum where children can handle meteorites, design aliens and have a go at making an impact crater! At 2:30 p.m. on the same day Prof Colin Pillinger, of Beagle 2 fame, will talk about discoveries on Mars.

The [Institute of Welsh Affairs](#) is holding an event on Thursday 13 March in the Faraday Lecture Theatre of Swansea University. The presentation is entitled “[Science and Government: Options for Wales](#)” and will be given by Professor Chris Pollock CBE, the Chief Scientific Adviser for Wales. For further information, click [here](#).

For information on what's going on in Wales – have a look at “[What's on Wales](#)” or “[Golwg ar Gymru](#)”.

Useful Links

Cysylltiadau Defnyddiol

[EPSRC](#) – Engineering and Physical Sciences Research Council

[STFC](#) – Science and Technology Facilities Council

[HEFCW](#) – Higher Education Funding Council for Wales / Cyngor Cyllido Addysg Uwch Cymru

bbc.co.uk/wales / bbc.co.uk/cymru – BBC Wales / BBC Cymru website

[The National Assembly for Wales](#) / [Cynulliad Cenedlaethol Cymru](#)

[The Welsh Assembly Government](#) / [Llywodraeth Cynulliad Cymru](#)

[European Commission – Research](#)