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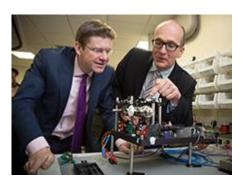
School of Physics and Astronomy Community



Spring 2015

Greetings

As you may have heard in the news in November, the School was <u>awarded one</u> of the four UK Quantum Technology hubs. Led by Professor Kai Bongs, the Hub has funding of over £80 million from government and industry. The Hub will design Quantum Technology devices to enable a dramatic improvement in precision measurements of gravity, frequency, rotation and magnetic fields. If you are interested to know more, or are wondering if they could be of use within your professional work, or of joining us, please do let us know.



Professor Kai Bongs (R) & the Rt Hon Greg Clark (L), Minister of State for Universities, Science and Cities announcing the Quantum Technology Hubs

The investment of £1 million in the undergraduate photonics & quantum matter laboratories has just been completed, to much acclaim from the first cohort of students to have worked in them. The Group Study project is a corner stone of the third year, and for the first time this year we have partnered with the School of Electronic, Electrical and Systems Engineering to deliver a cross-disciplinary project on using microwaves to perform Remote Sensing.

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Excitement is building as the <u>Large Hadron Collider begins its second multi-year run</u>, which will last until mid-2018. Birmingham professor Dave Charlton FRS, is the spokesperson of the ATLAS experiment, "It's very open this time. We don't know when a discovery is going to appear. It could be this year. It could be that it takes us 20 years. We don't know the answers before we start."

We were delighted that Kevin Gell, Birmingham graduate (1970), was <u>awarded a Doctor of Science by the University in December</u>. Kevin is the founder of Tessella an international analytics, software and services group, and a recipient of the Queen's Award for Enterprise in Innovation in 2011. The Tessella sponsored prize, for our final year projects, recognises innovation in the use of software.

On the social side the School's traditional Coniston weekend trip has just occurred, and was enjoyed by staff and students alike. This, always oversubscribed, activity at the University's Priestley outdoor centre led to a couple of days walking and socialising in clear cold, and - on the second day - wet conditions.



If you have photos from a Coniston trip, or Physics social events we would be delighted to receive electronic copies of them. The PPS Ball, with an Oscars theme, will shortly take place, and sold out in record time.

With best wishes,

Professor Andy Schofield Head of School Physics & Astronomy

News from the School of Physics & Astronomy

Birmingham physicists identify ancient planetary system with its own sun-like star



The discovery of five archaic planets around one of the oldest stars in the galaxy has raised the possibility that the Milky Way might be home to extremely ancient forms of life. Astronomers spotted the planets as they circled a star called Kepler 444, which lies 117 light years from Earth in the direction of Lyra, a constellation in the northern sky. Researchers used variations in the brightness of the star to calculate its age and found that it was among the first generation of stars to illuminate the Milky Way 11.2bn years ago. Read more.

Large Hadron Collider to launch again in dark matter quest



Physicists from Birmingham are involved in the re-launch of the Large Hadron Collider after a two-year upgrade. Test beams of proton particles have been successfully sent into the machine's 27 kilometres (16.7 miles) of circular tunnels and they soon hope to start circulating the beams in earnest as the gradual process of building up energy begins. Read more.

Poynting Physical Society update



After a successful first term for the Poynting Physical Society with demand high for events, the second term has continued in the same fashion as even more "PPS records" have been broken! Vice-President Ceri Bradshaw tells us more.

NucSoc update



NucSoc is the University of Birmingham's undergraduate Nuclear Society. We aim to provide the nuclear student body with academic support and socials throughout their time at Birmingham. Will Moncaster, NucSoc Secretary, tells us more.

AstroSoc update



With the new committee taking up the reigns, the future of AstroSoc looks bright with lots of exciting activities and events for people to get involved with. Outgoing Chair Paul Carter <u>tells us more</u>.

Welcome to WISE - Women in Science and Engineering Society



The Women in Science and Engineering (WISE) Society are the newest student group to join the EPS Community. They work to provide as many events and opportunities as possible to members across the College of Engineering and Physical Sciences to integrate, form networks and to help inspire the next generation of female scientists and engineers. Annabel Fitzgerald tells us more.

Student Instagram Takeover



With the growing popularity of Instagram as a social networking service, the College has recently launched a student-led takeover account. Every two weeks a different student from across the College will be managing the 'MyEPSLife' channel, taking photos and videos of their experiences and highlighting activity across our Schools and the wider University community. Explore the current activity here.

PhD student Maggie Lieu shortlisted for Mars One project



From 202,586 hopefuls to the 100 would-be astronauts. An astrophysics student studying for a PhD in The School of Physics and Astronomy has been named on the shortlist of candidates selected to set up the first human colony on Mars. Read more.

Birmingham researchers build momentum at CERN with New Physics experiment



Birmingham Particle Physics research group successfully completed a pilot run of the NA62 experiment at test facility CERN on Monday 15 December 2014. The experiment is a continuation of the very successful charged and neutral program at CERN which started with NA48. Read more.

Memorandum of Understanding signed with The National Physical Laboratory



The National Physical Laboratory (NPL) has signed a Memorandum of Understanding with the University of Birmingham that will see scientists from both institutions working collaboratively to develop new and exciting research capabilities. This builds on the active and established strong collaboration between the institutions within the Quantum Technology (QT) space. Read more.

A glimpse into how the weather was foretold in 1886



John Henry Poynting was the first professor of Physics at Mason College, which later became the University of Birmingham. A few months ago his granddaughter Elizabeth (now aged over 90) visited the University, and Dr Robert Whitworth had the pleasure of showing her items relating to her grandfather in the Department that he had founded. Read more.

Don't miss out! Book your place on the EPS Reunion 2015!



Do you have fond memories of your time at the University of Birmingham? Do you still keep in touch with those classmates who you pulled all-night study sessions with to get that last assignment finished? As a graduate of the College of Engineering and Physical Sciences, we would love for you to join us on campus on Saturday 20 June 2015 for a reunion. Read more.

Mini chance to make a massive difference



You can make a difference to your University in the time it takes to make a cup of tea.

To mark Micro-Volunteering Day on 15 April there are a whole range of opportunities to support Birmingham; all possible in just ten minutes or less.

These bite-sized tasks can have a big impact: from answering questions on your shopping habits for students' dissertations, to sharing your opinion on our website design or celebrating with the University's newest alumni by sending in your graduation memories. Email us to learn more.

Scholarships available for postgraduate study



The University is pleased to announce the launch of the <u>Distinguished Alumni Scholarship</u> <u>scheme</u>. Awards of £2,000 per scholarship will be offered to outstanding alumni wishing to undertake Masters study at the University during 2015. <u>Read more</u>.

In addition 224 new £10,000 scholarships available for Masters students from under-represented groups are available for 2015 entry through the Birmingham Masters Scholarship Scheme. Read more.

New staff in 2014/15

There have been a number of appointments in the School this term. Read a summary of our new staff online here.

Your School needs you...

Would you be able to share some of your time, expertise or connections to help our students to succeed?

We are currently looking for help and support from alumni with the following:

- All women in science and engineering. As part of National Women in Engineering Day, 23 June, the EPS Community
 is hosting a number of activities, conversations and events designed to celebrate women in engineering and scientific
 careers. If you work in science or engineering and would like to sit on our panel, get involved in the conversation on
 Twitter, or come along to our evening event, please get in touch by emailing us
- Undergraduate Open Day, 26-27 June. Could you donate a couple of hours of your time to pop back to your old School and speak to our prospective students about your time at Birmingham? For more information and to get

involved email us

Work experience placements are invaluable for our students, allowing them to learn about the world of work first-hand
and apply their knowledge in a real-life setting. If you work in industry and think you could offer a work experience
placement to our undergraduate or postgraduate students, please email us

There are many ways in which you can give a little back, from providing a career profile, to mentoring a student. Please email us if you would like to get involved and we'll be happy to talk to you.

College and School events taking place shortly...

EPS Inaugural Lecture Series

For information on upcoming lectures in the EPS Inaugural Lecture Series please visit our website

Tuesday 9 June 2015

EPS Societies' Awards

Come and celebrate with our student societies as we recognise their fabulous achievements in 2015/16.

Time: 7pm-11pm

Venue: Great Hall, Edgbaston Campus

Saturday 20 June 2015

EPS Alumni Reunion

As a graduate of one of the nine schools in the College of Engineering & Physical Sciences (EPS), you are invited back to campus for a Summer Reunion to get together with your fellow alumni to celebrate your experiences, accomplishments and friendships at the University of Birmingham.

Time: 9.30am-6pm

Venue: Edgbaston Campus

Please visit the website for more information and to secure your place at the Reunion

Tuesday 23 June 2015

National Women in Engineering Day Celebrations

Following the success of last year's first ever National Women in Engineering Day (NWED), this year's event is being held on Tuesday 23 June to celebrate the achievements of women in engineering and science. The EPS Community will be celebrating the day with a variety of exciting activities and events on campus.

Time: Programme to be confirmed **Venue:** Edgbaston Campus

For more information please email us

University events...

Saturday 25 April 2015

Fab 'n' Refresh

On Saturday 25th April 2015 the Guild of Students, in association with the Development and Alumni Office, presents Fab 'n' Refresh! Come back onto campus to party the night away with fellow alumni who graduated from 2005 onwards.

Time: 10pm-late

Venue: Joe's Bar, Guild of Students

Saturday 13 June 2015

Alumni Sports Day

Save the date for the 14th annual University of Birmingham Sport Alumni Sports Day. This year promises to be bigger and better than ever before with 16 events across 14 different sports. The events will take place on campus, at the Bournbrook and Metchley pitches and the Edgbaston Priory Club, creating a multi-sport festival.

Time: 9am-5pm Venue: Various

Monday 22 June 2015

Baggs Memorial Happiness Lecture 2015

The Baggs Memorial Lecture began in 1976 and the lecture series has seen many distinguished speakers tackle the topic of

happiness from their personal viewpoint including Yehudi Menuhin, David Attenborough, Peter Ustinov, Maureen Lipman, David Lodge, Adam Hart Davies, Robert Winston and Sue Lawley. This year the University is pleased to welcome Matthew Parris who worked for the Foreign Office and the Conservative Research Department before serving as MP for West Derbyshire.

Time: 6.30pm-8.30pm

Venue: Great Hall, Edgbaston Campus

Saturday 12 September 2015

Golden and 50th Anniversary Reunion Lunch

If you graduated in 1965 or before you are invited back to campus on Saturday 12 September to a Golden and 50th Anniversary Reunion Lunch with your fellow alumni to celebrate your experiences, accomplishments and friendships at the University of Birmingham.

Time: 10.45am-4pm Venue: Edgbaston Campus

Alumni group events...

The University of Birmingham has alumni groups all over the world that organise local events. To join a group and see details of upcoming events please visit the webpage and select your location.

Do we have the right details for you?

Please visit your.bham or email alumnioffice@contacts.bham.ac.uk.

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