

UNIVERSITY OF
BIRMINGHAM

School of Physics and Astronomy Community

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Spring 2017

Greetings from the School of Physics and Astronomy. You will see in this newsletter some of our developments from the last 12 months. You will know that this period also saw the award of the 2016 Noble Prize in Physics to David Thouless and Michael Kosterlitz for their work whilst academics at Birmingham. Combined with the announcement of the discovery of Gravitational Waves, this has been a very successful time for the School. These developments all add to the rich history of the School which we are keen to preserve and remember. Some of you will recall the Riefler Clock which we have had restored. The clock dates from the time of Poynting and is a top-quality pendulum clock made by Sigmund Riefler of Munich. For many years it provided the standard for all time keeping operations in the School/Department.

Our students too have had a busy term with plenty of new events and activities. If you are impressed with their articles please consider nominating them for an EPS Societies' Award.

If you are planning on visiting us for the Awards on Wednesday 7 June or the Alumni Reunion on Saturday 30 September, I look forward to seeing you and collecting your memories of Physics and Astronomy at Birmingham.

With best wishes

Professor Martin Freer
Head of School

THIS MATTERS

Quantum Clocks



Unravelling the puzzle of merging black holes

Our astrophysicists are making progress in understanding a key mystery of gravitational-wave astrophysics: how two black holes can come together and merge.

[FIND OUT MORE >](#)



Seven Earth-sized planets found

News in the international science media has been dominated this week by the ground-breaking discovery of seven potentially habitable Earth-sized planets orbiting the red-dwarf star TRAPPIST-1, which lies only 39 lies years from the solar system.

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WE ARE BIRMINGHAM

Our 300,000 alumni all share one thing in common: the University of Birmingham. From recent graduates to industry experts, aspiring leaders to inspirational movers and shakers, Birmingham alumni are making important things happen. Join the "We Are Birmingham" project and share your story with our students. You can inspire our students and offer an insight into the wealth of opportunities available to them. Plus, anyone who submits a profile before 1 July will be automatically entered into a draw to win a BrumBag full of University merchandise. Share your Birmingham story and help shape their future.

[SUBMIT YOUR WE ARE BIRMINGHAM PROFILE >](#)



Alumni Spotlight

Frank Kozurek (MSci Physics, 2002), reflects on his time at Birmingham and talks about his role as Head of Business Intelligence at National Express.

If you would like to share your story we would love to hear from you.

Simply fill complete our online [career profile form](#) or [email us](#) to tell us more.



Microvolunteering Day, 15 April

On Saturday 15 April we marked Microvolunteering Day with a range of bite-size activities where you can support the University in 15 minutes or less. Thank you to those who got involved. If you didn't but would like to, there's still time!

In Physics we are particularly keen to hear how your careers have

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developed so we can share your stories and help inspire our current students.

[FIND OUT MORE >](#)

University Reunion 2017

The Alumni Reunion 2017 provides a great opportunity to rediscover what made Birmingham "home" for you and to renew your lifelong connection to this special place. It's a fantastic time to reconnect with friends and classmates and see how Birmingham has grown into the university it is today. Join us for a day of reunion celebrations including campus tours, stress-free lectures, a chance to visit some of the latest additions to campus such as the new Library, and a plenty of opportunity to reminisce. There will also be time to visit us in Physics and Astronomy to find out how we have changed since you were last with us and to meet some of our current academics and students.



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Societies News

There are now eight student societies affiliated with the School of Physics & Astronomy: [PPS](#), [AstroSoc](#), [GUTS](#), [NucSoc](#), [WISE](#), [oSTEM](#), [SATNAV](#) and the new [Mozilla Campus Club](#). It's been a busy year with many events, careers activities, sporting competitions and new committees, so there's plenty to update you on.

The College of Engineering and Physics Sciences is home to 25 student societies. Each does fantastic work to promote employment opportunities, industrial visits, guest speakers and, of course, social events.

[FIND OUT MORE >](#)

EPS Societies' Awards 2017

Were you a member of a society while at Birmingham? Wish you had been? Or have you been impressed reading about the activities of our [current student groups](#)? Why not nominate them for a Societies' Award?

These Awards celebrate the lengths to which our students go to make the University a better place to work and play. Join our celebrations by nominating your society. Maybe your former society will win the much coveted *Society of the Year* trophy. They need your help!

[NOMINATE >](#)

News Round-Up

Our historic [Riefler Clock](#) has been painstakingly restored and is now back on display in the Poynting Building.

Miguel Navarro-Cia has recently been awarded the [Computer Simulation Technology \(CST\) Publication Award 2016](#).

After discovering the long-sought Higgs boson, our particle physicists are pioneering efforts to [explain how matter acquires its mass](#).

PhD student Serena Vinciguerra has recently won the [Hartle Award for the best student talk](#) in her session at the 21st International conference on General Relativity and Gravitation in New York.

[Singing binaries: listening to the chirps of black holes](#). In his inaugural lecture Professor Ilya Mandel discussed the detection of gravitational waves and explored the potential research opportunities arising from this revolutionary discovery.

Osman Kent, alumnus and serial entrepreneur, delivered the latest EPS Distinguished Lecture entitled "[Success gives you the credibility to talk about your failures](#)".

Events

Monday 15 - Wednesday 17 May

[Pint of Science](#)

Leading University of Birmingham academics will be speaking about their cutting-edge research. We aim to bring some of the most brilliant scientists to discuss their latest findings with you. You don't have to have any previous scientific knowledge or training, and this is your chance to meet the people responsible for the future of science.

Venue: Various locations across Birmingham City Centre

Wednesday 17 May

[Birmingham - Fraunhofer Joint Research Platform Launch](#)

The University of Birmingham is set to host the Birmingham – Fraunhofer Joint Research Platform Launch to establish closer ties with cutting-edge renewable energy technology in the UK and Europe.

Time: 9am-7:30pm

Venue: Elgar Concert Hall, University of Birmingham

Wednesday 7 June

[EPS Societies' Awards](#)

Celebrate with your student society as we recognise their extraordinary achievements with a gala, black-tie evening.

Time: 7pm-11pm

Venue: Edgbaston Campus

Saturday 17 June

[UBRacing 20th Anniversary](#)

Team members past and present, and motor sport enthusiasts are invited to join UBRacing in marking their 20th birthday and two decades of Formula Student at Birmingham. Join us for an afternoon of celebrations, take a peek at the 2017 car and be prepared for a few surprises.

Time: 1:30-6pm

Venue: Edgbaston Campus

Saturday 17 June

[Geotechnical Engineering 60th Anniversary Reunion](#)

We are delighted to announce that the Geotechnical Engineering masters degree programmes are celebrating their 60th year. To celebrate this notable achievement the University will host Geo60, a celebration and reunion of the programme to which all alumni and interested persons are invited to attend.

Time: 9:30am-5pm

Venue: Edgbaston Campus

Wednesday 28 June

[Mathematics Taster Day](#)

The School of Mathematics holds a Mathematics Taster Day for Year 12 pupils in the second half of the summer term. As well as information on studying mathematics at Birmingham, the day will include two sample lectures, a tour of campus and an interactive mathematics session.

Time: 9:30am-3:30pm

Venue: Edgbaston Campus

Tuesday 4 July

[Engineering Taster Day](#)

Our Engineering Taster Day is for Year 12 pupils who are thinking about applying to university to study an engineering degree. The day will consist of an introductory talk, a tour of campus, a subject fair and an interactive workshop.

Time: 9:30am-3:30pm

Venue: Edgbaston Campus

Sunday 16 - Thursday 20 July

[IUPAP International Conference on Women in Physics](#)

The International Union of Pure and Applied Physics (IUPAP) is delighted to announce that the 6th conference in this series will be hosted by Birmingham, UK. Organised in partnership with the Institute of Physics (IOP) and the Universities of Birmingham, Nottingham and Warwick, the Conference will foster the participation of women in physics and increase diversity in the field.

Venue: Edgbaston Campus

Wednesday 20 September

[London Mathematical Society Popular Lectures](#)

We are proud to begin the 2017/18 Birmingham Popular Mathematics Lecture series with the London Mathematical Society Popular Lectures, which are suitable for all who have an interest in Mathematics, and present exciting topics in mathematics and its applications. In this first event of the new academic year, David Tong (University of Cambridge) and Jason Lotay (University College London) will be speaking.

Time: 6:30-9pm

Venue: Elgar Concert Hall, University of Birmingham

Saturday 30 September

[University of Birmingham Alumni Reunion](#)

Join us for the big Anniversary Reunion on Saturday 30 September 2017. Whether you're celebrating your 50th anniversary or your 1st anniversary, come back to the Edgbaston campus and celebrate your University with staff, students and fellow alumni.

Time: 10am-5pm

Venue: Edgbaston Campus



You are in control of your data. We want to stay in touch with you and keep your information in accordance with your wishes. You will be kept updated with news from our campus, including research, educational activities and courses, events, alumni activities, and opportunities to support our fundraising. Depending on [your preferences](#), you will receive communications via post, email, telephone and social media. We would like to ensure that our interactions with you are appropriate and cost-effective. We will pay attention to your responses (including e-tracking) and, from time to time, may use your data for profiling, targeting, and research purposes. Your information will be [held securely](#) by the University of Birmingham and will only be made available to our academic & administrative departments, recognised alumni groups, and trusted agents acting on behalf of the University. Information on how your data is held and used is set out in our [Data Protection Statement](#). **If you wish to opt-out of any contact or have any questions about your personal data, please [contact the alumni office](#).** For reference, our Inland Revenue Charities reference number is X7237.