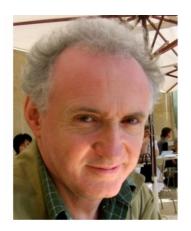


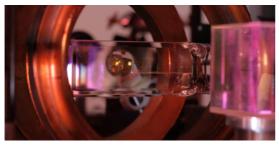
Welcome to your 2020 Physics and Astronomy Alumni Newsletter



Hello, I hope this newsletter finds you well.

It has been a turbulent year. At the start and through to the middle of the year: preparing for the government inspection of our research over the last six years, with some new appointments arriving, and many national and international prizes recognising School academic staff. And then there was the pandemic. We have survived and are well on the way to constructing a vibrant new academic year, albeit of a slightly abnormal nature.

Read more from Mike Gunn



Physicists make quantum technology smaller

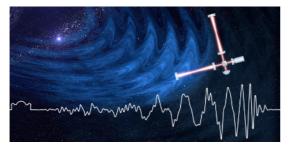
A way of shrinking the devices used in quantum sensing systems has been developed by researchers at the UK Quantum Technology Hub Sensors and Timing, which is led by the University of Birmingham.



CERN's first evidence for ultrarare process

Scientists at CERN, including Birmingham experts, have reported their first significant evidence for a process predicted by theory. The findings pave the way for evidential searches of new physics in particle processes that could explain dark matter.

Find out more Find out more



Gravitation wave researchers go beyond the quantum limit

Scientists working at the LIGO facility, including a team from Birmingham, have demonstrated how the ultra-fine tuning of the instruments enable it to push the boundaries of fundamental laws of physics.

Find out more



Particle physics expert wins award for inspiring the public

Professor Konstantinos Nikolopoulos, has achieved an award in the public outreach category of the ERC Public Engagement with Research Awards 2020 for his project ExclusiveHiggs.

Find out more



Our response to the COVID-19 crisis

From making hand sanitiser to mapping the spread, our researchers are contributing to the global effort to counter the COVID-19 pandemic and its effects. Staff and students in the School and wider College of Engineering and Physical Sciences are also supporting the NHS by volunteering their time to fight the outbreak.

Find out more about what we're doing to support the global effort



AstroSoc QUARANTINE Talks

To help with the boredom of lockdown, our Astronomical Society have launched a series of QUARANTINE Talks, helping you explore the Universe from the comfort of home. Tune in every Monday at 3pm BST until 28 September.



An amazing year for PPS!

This has been an exceptional year for the Poynting Physical Society. They've held 22 events in 20 weeks, including some of the biggest events the society has ever seen. They also hosted the National Students Space Conference for 500 visitors!

EPS SOCIETIES' AWARDS 2020

Success for our students at the annual Societies' Awards

Sadly we weren't able to hold the usual celebrations for our remarkable student groups, but not to be hindered by a pandemic we took the event online for a unique virtual Awards ceremony. Huge congratulations to PPS who won the Diversity and Inclusion Award, Birmingham Energy Society who won the Industrial Award, AstroSoc for the Continued Excellence in Outreach Award, and undergraduate Paige Ramsden who was named Volunteer of the Year!

Watch the Awards ceremony



Birmingham, STEM Ambassadors and Me

Yvonne Baker, alumna and Chief Executive of STEM Learning, delivered the 2020 EPS Distinguished Lecture in March. Best known for founding the national STEM Ambassadors volunteering scheme, Yvonne is passionate about encouraging school pupils to see the every-day science around them. In her talk, she reflects on her favourite Birmingham memories and shares her thoughts on how we can continue to make science, technology, engineering and maths attractive to the young and not so young.

Watch Yvonne's Distinguished Lecture

WE ARE BIRMINGHAM ALUMNI

Help inspire our students

From recent graduates to industry leaders, you are making important things happen. You can inspire young people and offer an insight into the opportunities awaiting them.



Alumni perspective: Tom Dack

Tom graduated in 2015 with a BSc in Physics with Particle Physics and Cosmology. Tom now works for the Science and Technologies Facilities Anyone who submits a profile will receive an Old Joe fridge magnet. Never have your stories been more valuable.

Share your Birmingham story

Council. Here he gives us an insight into what it's like working alongside global research and significant discoveries.

Watch Tom's video profile



Could you mentor a student?

We're looking for enthusiastic alumni and professionals to provide expertise and advice to help our students start their careers. Mentoring makes a real difference; we all know the benefits of having someone to bounce ideas off, particularly in these current uncertain times. Your advice is invaluable. If you'd like to be that person, please get in touch.

Email Grace to become a mentor

News roundup

New graduate Sabeeka Qureshi launches a careers blog offering advice to students and graduates looking for a jobs or internships in lockdown.

Postgraduate students launch company to reduce teacher workload.

Gravitational wave experts grapple with the **cosmic mystery** of GW190814.

Recent graduate <u>Mercurius Saad receives £40,000 grant</u> from Innovate UK towards his education start-up Tutorbloc.

Dr Philip Ilten has achieved a prestigious award for his contribution to the <u>field of high</u> <u>energy physics</u>.

Quantum technology offers improved planning for epilepsy surgery.

Relighting the economy with heat.

Mysterious delta scuti stars start to surrender secrets.

Birmingham astronomers honoured in Royal Astronomical Society bicentenary awards

<u>Inertial navigation systems</u> are being developed by the UK Quantum Technology Hub Sensors and Timing.

Dr Davide Gerosa has received the Young Scientist Prize from the International Society

on General Relativity and Gravitation in their 2020 awards.

Birmingham joins **hunt for Earth-like planets**.

University of Birmingham <u>appoints leading computational scientist as Pro-Vice-Chancellor</u> and Head of College of Engineering and Physical Sciences.

Do we have the correct contact details for you?

Make sure you update your details to ensure you receive the latest news and information about events in your area. <u>Update now</u>













Address: The University of Birmingham, Edgbaston, Birmingham, B15 2TT Tel: +44 (0)121 414 3344 Email: alumnioffice@contacts.bham.ac.uk

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