

UNIVERSITY OF
BIRMINGHAM

School of Mathematics Community

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THE EPS COMMUNITY



Winter 2014

Greetings,

As you will see from this newsletter it's been an exciting few months in the School of Mathematics, including the announcement that [we will be working with colleagues at UERJ in Brazil](#) to help improve the Brazilian offshore oil industry. Following on from their LMS Whitehead Prize award, the work of Professors Daniela Kühn and Deryk Osthus has been further recognised, through their [invitation to deliver a lecture at the 2014 International Congress of Mathematicians](#). We are proud to announce that Dr Andrew Treglown and collaborators won the College of Engineering and Physical Science [Best Publication award September 2014](#) for their paper 'The number of maximal sum-free subsets of integers'.

We are delighted that the hard work of our staff was recognised with the [College promotions](#) in the summer and are pleased to congratulate David Craven on becoming a Senior Birmingham Fellow, and David Leppinen and Olga Maleva on their promotions to Senior Lecturers, whilst Professor Chris Parker has [received an award from the Graduate School](#) for his work supervising doctoral researchers. We have also gained a number of [new staff](#) members to the School and look forward to the positive impact they will have on the department.

Continuing our commitment to be engaged both with the public and local schools, in September we were part of the distinguished [British Science Festival](#) which was held on campus and across the city. Members of staff from the School of Mathematics delivered a number of interesting and inspiring workshops to hundreds of secondary school and sixth form pupils during the festival. [The Birmingham Popular Maths Lectures](#) continue into their third year and we were delighted to begin the series this year by hosting the London Mathematical Society's annual public lecture in September, filling the Bramall Music Building's Elgar Concert Hall to capacity with mathematics enthusiasts. The Birmingham program continues through the autumn and spring terms and if you are local to the University, please do take a look at the upcoming lectures as all are welcome to attend.

This year looks to be no less eventful for [MathSoc](#) than the last. Following on

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from their triumphs at the inaugural EPS Societies' Awards, they have, alongside their usual enthusiasm in welcoming all our new and returning students, ran a charity cake sale, launched the MathSoc Volunteering Scheme, organised a trip to Amsterdam and organised a successful careers networking evening. Our students are also working with others from across the College of Engineering and Physical Sciences in the newly formed Rocketry Society, developing plans to [launch their own liquid fuelled rocket into the earth's upper atmosphere.](#)

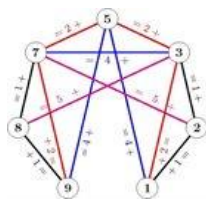
So as the end of the first semester in the 2014-15 academic year approaches, I would like to wish you all a pleasant and restful Christmas and I look forward to updating you with the latest news from the School and our students in the Spring Term.

With best wishes,

Dr Paul Flavell
Head of School
Mathematics

News from the School of Mathematics

New mathematical discovery in maximal sum-free sets after a decade of the unknown



The College of Engineering and Physical Science Best Publication award September 2014 was awarded to Andrew Treglown, University of Birmingham and József Balogh, Hong Liu, Maryam Sharifzadeh, University of Illinois for 'The number of maximal sum-free subsets of integers', Proceedings of the American Mathematical Society, in press. [Read more.](#)

Birmingham mathematicians help strengthen UK-Rio research links



The University of Birmingham and the University of Nottingham have strengthened their collaborations with Brazilian institutions in the state of Rio de Janeiro after securing funding for a number of country-specific research projects. [Read more.](#)

MathSoc Update



It's been a busy start to the new academic year for MathSoc. President Eve Dam and Director of Volunteering Dan Lockett [tell us more.](#)

Rocketry Society launch Project Chamberlain



The University of Birmingham Rocketry Society (UBRS) is the newest student society within the College of Engineering and Physical Sciences. The group are embarking on the significant task of launching their own liquid fuelled rocket into the earth's upper atmosphere in a challenge known as Project Chamberlain. Terry Moorton, President of UBRS and Director of Project Chamberlain, [tells us more](#).

Get voting to #doubleuobmoney



This year we offered students the chance to bid for up to £2,000 to fund their exciting and unique ideas through *Hands Up*, funded by donations from our alumni and supporters. Our decision panel had a tough job choosing from 80 excellent applications, 19 of which received funding, and two projects so impressed us that they have been given the chance to double their money. To decide who takes the cash, visit our [website](#) and cast your vote before Monday 1 December 2014.

Mathematics academics awarded LMS Whitehead Prize and invited to give ICM lecture



Professor Daniela Kühn and Professor Deryk Osthus were recently awarded the LMS Whitehead Prize and were invited to give a lecture at the 2014 International Congress of Mathematicians in Seoul. [Read more](#).

College of Engineering and Physical Sciences at the British Science Festival 2014: Highlights



The College shone at the British Science Festival in September year with over 30 contributions to the Festival's main scientific events and workshops, and the Young People's Programme. From new robot technology to HS2 and the big bang, our scientists and engineers addressed the big debates and offered interactive activity to engage young people in STEM futures. [See more](#).

Giving back



Did you know that College of Engineering and Physical Sciences graduates make up approximately 22% of the University's alumni population and are among the most generous donors to the Circles of Influence campaign? [Read more](#).

New staff in 2014

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're currently looking for help and support from alumni with the following:

- 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.

Events taking place shortly...

College and School events

[Birmingham Popular Maths Lectures](#)

The Birmingham Popular Maths Lectures are open to anyone with an interest in Maths, particularly those studying for A-level and above. There is no need to book just come along to the Watson Building from 7pm for a 7.30pm start.

Venue: Watson Building, Edgbaston Campus

EPS Inaugural Lecture Series

Thursday 27 November 2014

[Professor Jeremy Wyatt, Professor of Robotics and Artificial Intelligence, School of Computer Science](#)

Robotics is reaching a tipping point. The intelligence and robustness of robots increased hugely in the past fifteen years. This has allowed them to leave the lab and carefully controlled environments like the factory floor and enter our world. In this public lecture, aimed at the non-specialist, Professor Jeremy Wyatt will explain the achievements of intelligent robotics to date. He will also highlight some of the challenges we must meet to bring robots into our everyday lives. Finally, Professor Wyatt will highlight some of the work carried out at Birmingham over the past decade, particularly breakthroughs in robot planning, robot learning and robot manipulation. The lecture should be accessible to people from age 12 up.

Live robot demonstrations will be included during the evening.

Venue: Leonard Deacon Lecture Theatre, Medical School Building, followed by a drinks reception in the Wolfson Common Room, Edgbaston Campus

For more information on other lectures in the EPS Inaugural Lecture Series please visit

www.birmingham.ac.uk/eps/inaugural

Friday 28 – Saturday 29 November 2014

[The National Engineering & Construction Recruitment Exhibition](#)

Supported by the University of Birmingham, this is the largest engineering recruitment exhibition in the UK and with top companies including Network Rail, Amey, Canary Wharf Contractors, The Royal Air Force, Carillion and many more in attendance, this is your opportunity to find job vacancies, find answers to all your career-related questions and meet employers.

Venue: NEC, Birmingham

Monday 8 – Wednesday 10 December 2014

[International Conference on High Speed Rail - 8th-10th December 2014](#)

2014 marks the 50th anniversary of the first Shinkansen high speed line in Japan. The University of Birmingham is marking this historic occasion by holding an international conference on High Speed Rail

Venue: Edgbaston Campus

Tuesday 10 March 2015

[EPS Distinguished Lecture: Prof Dr PE Seeram Ramakrishna](#)

Longer life has always been a dream of human beings. Except for the recent one hundred years, the average life span was below forty for the past 10,000 years. Noticeable aging effects kick in as early as mid-twenties! More than a million medical devices have been invented to improve the quality of human life. What promise do they hold for humans to live beyond 100 years healthily and perhaps happily?

Venue: EPS College, Edgbaston Campus

Tuesday 9 June 2015

[EPS Societies' Awards Night](#)

Come and celebrate with our student societies as we recognise their fabulous achievements in 2014/15

Venue: The 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

Venue: Edgbaston Campus

University events

25 November – 3 December 2014

The Edward Cadbury Lectures 2014

The theme for 2014 is 'Is the New Testament Anti-Jewish?' and will consist of a series of lectures given by Professor Amy-Jill Levine, Vanderbilt University USA.

Venue: Edgbaston Campus

Thursday 27 November 2014

Chaplaincy lecture - A Quaker astronomer reflects on the Universe and us

This year's Chaplaincy Lecture will be given by Dame Jocelyn Bell Burnell, a prominent astrophysicist and Quaker.

Venue: Elgar Concert Hall, Bramall Music Building, Edgbaston Campus

Monday 8 December 2014

Festive Drinks at the University Carol Service

Organised by the University Chaplaincy and Department of Music, this is a joyful Christmas celebration for alumni, staff, students and families followed by mince pies and mulled wine in the Rotunda at 7.30pm.

Venue: Great Hall, Aston Webb Building, Edgbaston Campus

Thursday 19 February 2015

Alumni vs Students vs Staff Quiz, 6.30-9.00pm

Put your general knowledge to the test at an informal quiz in Joe's Bar, Guild of Students.

Venue: Joe's Bar, Guild of Students, Edgbaston Campus

Saturday 12 September 2015

Golden and 50th Anniversary Reunion

Alumni who graduated in 1965 or before are welcome to join for a special reunion lunch

Venue: Edgbaston Campus

Do we have the right details for you?

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

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