

#### **News Archive**

#### September 2014 - August 2015

#### August 2015: Congratulations to Pucheng and Yavor!

Pucheng Shi and Yavor Stoev have been awarded their PhDs in Mathematics. For details of their thesis titles, supervisors, and the ever-growing list of PhD alumni of the department, please view our PhD "<u>Roll of Honour</u>". Congratulations Drs Shi and Stoev!

#### August 2015: Combinatorics Colloquia 2015 report published



The write up from our Combinatorics Colloquia 2015 is now available to read online - just follow <u>this link</u>. It provides a summary of all our speakers' presentations and some great photos which really capture the sense of the event. Join us next year for our 10 year anniversary!

#### August 2015: New seminar series within the department

We are very pleased to add the <u>Seminar on Operations Research</u> to our seminar series, as of Michaelmas Term 2015. The series will run on Wednesday afternoons, from 4pm - 5pm in OLD.1.26 (Old Building, LSE). The first seminar takes places on 2 September, when Zeev Nutov (The Open University of Israel) will speak on 'On LP-Relaxations for the Tree Augmentation Problem'.

## July 2015: Changing of the guard



The end of the month bought a major change to the Department: the Head of Department role passed from <u>Professor Jan van den Heuvel</u> to <u>Professor Martin</u> <u>Anthony</u>. We named the day 'Jandependence Day', in Jan's honour, to thank him for the incredible work he has done for the team over the past four years - far too much to mention here. We also wanted to welcome Martin into his new, very important role and

what better way to do that than to have a party! We were very happy to be joined by colleagues, both burrent and former, as well as our PhD students. There was specially-crafted maths bunting, balloons, beer from our favourite brewer (Dave Scott of <u>Kew Brewery</u>), an orb, a sceptre and even a delicious cake in the shape of a crown - every coronation needs one! We have now entered the era of 'Martination' and look forward to all that is to come!

## July 2015: LSESU Student-Led Teaching awards 2015

This year, more than 20 of the teachers in the Department of Mathematics were nominated for a <u>Student-Led</u> <u>Teaching Award</u>. We congratulate all of these teachers on receiving their nominations and thank them for all their efforts to provide high quality teaching and feedback throughout the year. Read more about the nominations in the <u>full article</u>.

# July 2015: Prizewinners aplenty!

Summer Term is a time for celebration and we're very pleased to announce the following winners in 2015:

<u>LSE Teaching Promotion Awards</u>: Dr Amol Sasane was promoted to Professor in recognition of his exemplary contributions to courses that are compulsory, challenging and highly technical, including effective student feedback and the design of original resources that have been inherited and highly valued by junior faculty in the department, as well as for services to theUndergraduate Studies Sub-Committee and the departmental teaching committee.

<u>LSE Class Teacher Awards</u>: Elisabeth Grieger, Matthew Jenssen, Philip Johnson, Tony Whelan and Georgios Zouros were nominated by our department in recognition of the special contribution made to teaching.

## **Mathematics Student Prizewinners 2015**

<u>Cyril Offord Prize 2015</u> - this prize for outstanding performance in Mathematics was awarded to Jeremy Macrae, BSc Mathematics and Economics. Jeremy said "I have spent an amazing three years at the LSE in large part thanks to the Mathematics Department." <u>Read more...</u>

<u>Institute of Mathematics and its Applications Prize</u> - Shyamal Patel, BSc Mathematics and Economics, is this year's Joint Winner of the IMA Prize for Outstanding Performance in the Final Year of an Institute of Mathematics and its Applications approved course.

## July 2015 Workshop on Search Games and Rendezvous



The Shard, Warwick Business School London Campus: July 6 and 7, 2015 Confirmed Speakers: Shmuel Gal (Haifa, Israel) Robbert Fokkink (TU Delft, Netherlands) Thomas Lidbetter (LSE, UK) Noemi Zoroa (Murcia, Spain) Organisers: Steve Alpern, ORMS Group, Warwick Business School, University of Warwick: <u>steve.alpern@wbs.ac.uk</u> Thomas Lidbetter, LSE: <u>t.r.lidbetter@lse.ac.uk</u>

Talks on all topics related to search and patrolling, including predator-prey games, are welcome. Rendezvous problems will also be covered. This is an 'informal' workshop with no fees, but prior registration through the organisers is required. More information can be found <u>here</u>.

# July 2015: Public lecture: A Beautiful Question: finding nature's deep design



World-class physicist and Nobel laureate <u>Professor Frank Wilczek</u> (MIT) discussed his new book, "<u>A Beautiful Question</u>", which argues that beauty is at the heart of the logic of the universe, a principle that had guided his pioneering work in quantum physics. *A Beautiful Question* is the culmination of Wilczek's life work, a work that looks to combine the age-old quest for beauty with the age-old quest for truth. The press release can be read <u>here</u>.

The event was chaired by <u>Professor Bernhard von Stengel</u>. The podcast of the lecture can be viewed <u>here</u>, the video of the lecture can be viewed <u>here</u> and photographs taken by <u>Dr Tugkan Batu</u> can be seen <u>here</u>. July 2015: It All Adds Up: Celebrating 150 Years of Women Across the Mathematical Sciences The department sponsored, Judy Wang, MSc Applicable Mathematics 2014/15 student to attend the following conference at Oxford University in April 2015: "It All Adds Up: Celebrating 150 Years of Women Across the Mathematical Sciences". An article written by Judy about her experience at the Conference can be found <u>here</u>.

## June 2015: Maths at LSE blog launches!



We're very excited to announce the launch of our research blog, 'Maths at LSE'! The core mission of this blog is to increase public awareness and understanding of the research we undertake within our Department. Blog entries will highlight news and views on the work of our academic colleagues, both those based here in the Department and our esteemed guests. Take a look <u>here</u>. Current entries come from Andre Nies (University of Auckland), Yannai A. Gonczarowski (Hebrew University of Jerusalem and Microsoft Research), Bernhard von

Stengel (LSE) and Andy Lewis-Pye (LSE)

#### May 2015: LSE Green Impact: Gold Project Award received



The Department was very excited to be presented with a Gold Project Award at this year's Green Impact Awards. The Award reflects the high level of involvement and green saving we have demonstrated within the department. This photograph of our award features some of the wonderful new plants we have recently cultivated.

#### May 2015: Prof. von Stengel interviewed on BBC World News

Prof. Bernhard von Stengel appeared on BBC World news on Monday 25 May, following the sad news of John Nash's tragic death. Prof. ven Stengel was interviewed by the anchor, discussing Nash's work in game theory and how this relates to the Greek financial crisis, particularly with reference to negotiating with creditors.

#### April 2015: SSLC Annual Lunch

As a small token of our thanks for all their hard work this year, we took our undergraduate and masters student representatives from the departmental Staff-Student Liaison Committees (SSLCs) out to lunch at <u>The Old Bank of England</u>. Good food and good company was an excellent way to spend a lunchtime. The SSLCs for each programme meet regularly to discuss matters of common interest. The committees are central to effective quality assurance of courses and programmes and provide a key forum for student engagement. We really do appreciate the work our representatives: thank you, everyone!

## April 2015: LSE Undergraduate Offer Holders' Visit Day

The department was delighted to meet incoming students at LSE Offer Holders' Day. Martin Anthony talked them through the degree programmes and gave a mini-lecture on the mathematics behind the Gale-Shapley algorithm for producing stable matchings, something with important economic and other applications (and work for which Gale and Shapley were awarded the Nobel Prize in Economics). Offer holders, staff and current students then had lunch together, with plenty of time for discussion and questions. We look forward to welcoming the participants to the department in September!

#### April 2015: Postgraduate Combinatorial Conference 2015

The LSE Department of Mathematics had a good showing at the recent <u>2015 Postgraduate Combinatorial</u> <u>Conference</u> held at Queen Mary University of London (QMUL), with five of our combinatorics PhD students (Ewan, Matthew, Daniel, Barnaby and Ahmad, who wrote this brief report) giving a talk on recent progress on their respective research problems. The students also had a chance to network and discuss research problems with fellow research students from the wider combinatorics community from around the UK. The LSE wish to thank the event organisers (Katie Clinch and Trevor Pinto, QMUL) for hosting the event and we look forward for the 2016 edition. For more information on our PhD students' research interests, please click here.

## March 2015: PhD Alumna wins Mastermind 2015



Hearty congratulations are extended to Dr Marianne Fairthorne, following her spectacular, close-fought win on BBC's Mastermind 2015. She saw off five other finalists by scoring 25 points and, crucially, no passes. Her specialist subject was the life of the 15th century Italian noblewoman Caterina Sforza and she showed excellent prowess in the general knowledge round, too. In previous rounds, Marianne specialised in such

topics as the Roman Empress Livia (the villainess in I Claudius) and Çatalhöyük – a fantastic large Neolithic and Chalcolithic site now in Turkey.

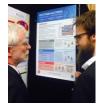
Marianne is one of our <u>PhD alumni</u> who was awarded her doctorship in June 2011. Marianne now works as a quantitative analyst in London and is a regular quizzer. Of particular note, she reached the quarter finals of University Challenge in 2008/9 as part of the LSE team – they lost to the eventual winners that year. Also, in 2013, she <u>led the Festival Fans team to the semi-finals in Only Connect</u>.

# March 2015: MSc Students' Bletchley Park visit



On Saturday 7 March, a group of our Applicable Mathematics Masters students visited <u>Bletchley Park</u>, the iconic heritage site of World War 2 codebreaking. The most famous of the cipher systems to be broken at Bletchley Park was the Enigma, subject of the 2014 award-winning film, "The Imitation Game".

# March 2015: Dr Paul Dütting presents "Spectrum Auction" poster in Parliament



Paul Dütting, an LSE Fellow in the Department of Mathematics, presented his poster "Spectrum auctions: Greed is good,... if you do it well!" at <u>SET for Britain 2015</u> on 9 March at Westminster. The poster addressed the issue of how mathematics can help organise the optimum sale of spectrum rights. Based on Dr Dütting's article, "<u>The Performance of</u> <u>Deferred-Acceptance Auctions</u>", the poster was well-received and prompted a number of guestions from the audience of MPs, scientists, engineers and fellow mathematicians. For

more information about the event, please click here.

## February 2015: The Department of Mathematics joins Twitter



We're very excited to have launched our Twitter account. Come and follow us: <u>@LSEMaths</u>. There'll be more social media developments coming in the next few weeks so please keep checking back.

# January 2015: Dr Dütting's poster to be displayed at SET for BRITAIN 2015

We are very pleased and proud to announce that Dr Paul Dütting's poster, entitled "Spectrum Auctions: Greed is Good,... If You Do It Well!", has been selected to appear at the final of the SET for BRITAIN 2015 Mathematical Sciences Session on 9 March. The session runs from 18:15–21:00 in the Attlee Suite, Portcullis House. The overall aim of SET for BRITAIN is to encourage, support and promote Britain's earlystage and early-career research scientists, engineers, technologists and mathematicians who are an essential part of continuing progress in and development of UK research and R&D through a series of posters and exhibitions. Congratulations, Paul—we look forward to seeing your poster soon!

## December 2014: PhD alumna faces the Mastermind chair

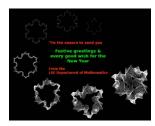


Dr Marianne Fairthorne, one of our <u>PhD alumni</u> who was awarded her doctorship in June 2011, joined three other hopefuls in episode 18 of series 2014/15 of BBC's *Mastermind*. She made it through to the semi-finals, which are due to be broadcast in mid-February on BBC Two. Well done Marianne!

# December 2014: REF results released

To read the analysis of the REF results from the Department and the School overall, please click here.

## December 2014: 2014 Christmas card competition



We asked our PhD students to design a Christmas e-card for the Department to send to our colleagues and the winner was... Barnaby Roberts! His winning creation can be found below and more information about the competition and our green impact efforts can be found <u>here</u>. Thank you Barnaby!

# **December 2014: Departmental Christmas party**



It was wonderful to gather together so many of the Department and our close friends at our Christmas lunch. The food was excellent and the company was even better. It was a great opportunity for everyone to catch up, relax and begin their countdown to Christmas and the New Year. Happy holidays, one and all!

# November 2014: PhD alumnus, Dr Lidbetter's thesis awarded OR Society prize



We are thrilled to announce that our PhD alumnus, <u>Dr Tom Lidbetter</u> (Senior LSE Fellow, Department of Management), has won the 2013 Doctoral Dissertation Award from the <u>Operational Research Society</u> for his PhD in Mathematics (<u>awarded from our Department</u> in June 2013). The prize, for the "most distinguished body of research leading to the award of a doctorate in the field of Operational Research", was awarded for Tom's PhD Thesis entitled "Hide-and-Seek and Other Search Games".

Tom will make his winner's presentation at the Beale Lecture in Manchester in February 2015. Further details appear in the January 2014 issue of <u>Inside OR</u>.

## November 2014: New book co-authored by Dr Amol Sasane



Amol has co-authored with Sara Maad Sasane (Lund University, Sweden), a new book entitled "A Friendly Approach to Complex Analysis" published by World Scientific. An excerpt from the review by Peter N. Ruane for the Mathematical Association of America explains: "This book is 'friendly' because... the narrative always conveys a sense of direction, and it makes many valuable comparisons with real and complex analysis. Overall, this is a very nice addition to the existing literature on complex analysis. It is rich in ideas and there is a very effective use of diagrams at key points in the text." The publisher's website for the book can be found <u>here</u>.

## October 2014: Departmentally-created artwork unveiled



We're very pleased to announce that the art display of Dr Andy Lewis-Pye's Royal Society Flowers of Segregation model is now in situ on the 3rd floor corridor of Columbia House, outside Andy's office—and it's looking great (the accompanying picture doesn't do it justice!). Produced alongide George Barmpalias, and Richard Elwes, it was a winner in the Royal Society's <u>Picturing Science</u> competition, in the Infographics category. More information is available <u>here</u>.

Hearty thanks go out to Rebecca Lumb for coordinating the project and Tony Hough, Senior Maintenance Technician from Estates, who very kindly took this job on and generously contributed to our Green Impact statement by using

Perspex offcuts to create the frames! And, of course, Andy, for letting us splice up his incredibly stunning model—thanks all! Do stop by and take a look, when you have a chance.

# September 2014: Prof Bernhard von Stengel interviewed by BBC Newsnight



On Monday 1 September 2014, <u>Prof Bernhard von Stengel</u> appeared on BBC Newsnight. He was interviewed as an expert, in front of the Emirates Stadium (home of Arsenal FC, who made a number of summer signings), on the "economics of the football transfer window". We followed up on Bernhard's experience in a brief interview, which can be read <u>here</u>.

September 2014: Report from the Colloquia in Combinatorics now available

Dr Jozef Skokan has provided a brief summary of the events which took place at this year's Colloquia in Combinatorics. You can also see some photos of the LSE-hosted day, provided by Event Analysis LTD. Please read more <u>here</u>.