

THE SUSS-EX CLUB

NEWSLETTER No.19, MAY 2011

Since the last newsletter the Suss-Ex Club has arranged a well-attended talk by John Barrow, followed by supper, a visit to *Yes, Prime Minister* at the Theatre Royal, and a very popular tour of St Paul's Cathedral followed by a performance of Bach's *St John Passion* (see report below). This issue gives details and booking forms for a talk by Sir Harry Kroto, also followed by supper, and for further theatre visits. The Club has been asked to arrange a meeting for alumni during the University's 50th Anniversary celebrations on 10-11 September. Visit www.sussex.ac.uk/fiftyyears for more information on all the events and activities.

You can find this newsletter and other documents on our website: <http://www.sussex.ac.uk/suss-ex>
The Club is organised by a steering committee chaired by Sir Gordon Conway. The current members would be pleased to hear from anyone who would like to join them. Their email addresses are as follows:

A.Goldman@cowbeech.f9.co.uk
adrian@peasgood.plus.com
C.M.Goldie@sussex.ac.uk
g.conway@imperial.ac.uk
jkfuller21@hotmail.com

J.Platt@sussex.ac.uk
k.p.wheeler@sussex.ac.uk
miniperson2003@yahoo.co.uk (Steve Pavey)
R.J.Benewick@sussex.ac.uk
sue.bullock@hotmail.co.uk
J.D.Smith@sussex.ac.uk

Professor Sir Harry Kroto FRS Friday 17 June

La Créativité sans Frontières

Harry is Francis Eppes Professor of Chemistry in Florida State University. He graduated from Sheffield and held post-doctoral positions in North America before coming to Sussex in 1967. He worked on a variety of topics on the borders between chemistry, physics and astronomy and with other colleagues in chemistry discovered a new form of carbon. This was recognised by the award of the Nobel Prize for Chemistry (shared with Robert Curl and Richard Smalley) in 1996. He set up the Sussex-based Vega Trust to present science to non-scientists and preserve words and images of scientists for historical record. He left Sussex in 2004 and continues to be active in research and in lecturing on the role of science in society.

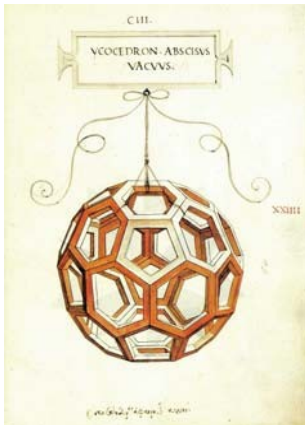
A synopsis of the talk appears overleaf and a booking form is found at the end of the newsletter.

La Créativité Sans Frontières

Harold Kroto Florida State University



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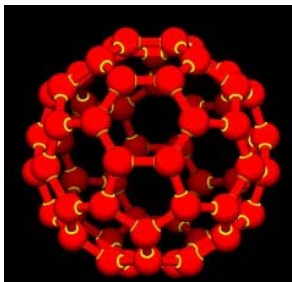


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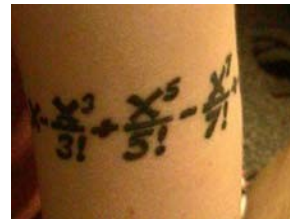
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From <http://pics.twobraind.com/132/free-photo-of-science-world-geodesic-dome-structure/>



4

Children are not the only ones who instinctively appreciate the elegant beauty of highly symmetric structures such as the soccer ball (Fig 1) and “play” with them. Artists, architects, scientists, mathematicians and engineers are also fascinated by elegant structures and use them in their creative efforts. Leonardo da Vinci drew the magnificent image (Fig 2) and Buckminster Fuller designed geodesic domes such as that in Fig 3. When C_{60} Buckminsterfullerene was discovered it was its elegant symmetry (Fig 4) that captured the imagination of scientists and non-scientists alike. More subtle yet no less cathartic responses are engendered in the minds of people who possess the fluency to appreciate not only the beauty of mathematical symbols but also the intricate elegance of their operations as well as their value in applications (Fig. 5)



5

Nicole, a physics grad student writes: *My tattoo is the Taylor expansion of sine. I consider it the most beautiful thing I have ever learned. I got the tattoo after my freshman year at MIT. It has additional meaning to me since $\sin(x) \approx x$ is one of the most useful things in physics.*

Indeed, mathematics, in particular symbolic algebra, is arguably our most treasured intellectual creation, as mankind finally realised that it was the language in which the Universe speaks and reveals its deepest and most spiritually moving secrets

The presentation will explore some of the common aspects of the creative response - sans frontières - from an appreciation of the forms discovered by scientists and readily appreciated visually to the mathematical forms created by humans as well as the elegant creations of artists through which they explore the human condition.

However something new has just entered the equation – the Internet – and it is arguable that it has catalysed more human creativity than any invention since the printing press as individuals are now able to broadcast on every topic imaginable and in particular use the GooYouWiki world to help to improve education globally.

It is a fascinating and thought-provoking fact that it is the appreciation of patterns both simple and complex that abound in the physical and natural world as well as in mankind’s symbolic and artistic creations that, when combined with human curiosity, have driven advances in understanding at every level and changed every aspect of the modern world.



Theatre Trips



Here are the latest suggestions for Suss-Ex theatre trips. The plays are:

- **Michael Frayn, Alarms and Excursions**, August 1-6, tickets £21
'examines with hilarious consequences what happens when the modern world goes wrong', in 'tales of technological terrors'. Some new material has been written especially for this production.

- **Lee Hall, The Pitmen Painters**, Aug. 29-Sep. 3, tickets £22
This is a new play from the National Theatre, touring prior to opening in the West End. It tells the story of a group of miners who in the 1930s hired a professor to take an evening class on art appreciation – which led them to start painting themselves.
'A beautiful work of art that everyone should see' (*The Times*)
Winner of the *Evening Standard* Award for best new play.

If you are interested, let Jennifer Platt know **by June 2nd** (preferably by e mail to j.platt@sussex.ac.uk - or phone 01273 555025, internal mail to Freeman Centre [n.b. no longer Arts D] on campus, or post to 98 Beaconsfield Villas, Brighton BN1 6HE). A booking needs to be made promptly to ensure that tickets are available, and for the second play it seems a good idea to fix things up before the main holiday season intervenes.

The prices of tickets listed include the group reduction, which we get if at least ten people want to go. Dinner together beforehand, or after a matinee, will be booked at Carluccio's for those who want it. Please use the slips **on p 7**: just mark all days/times when you are free, number those in order of preference, and indicate the number of tickets wanted and whether you would like to join dinner before (evening) or after (matinee). You will be notified of the outcome very soon after **June 2nd**.

St. Paul's Cathedral tour and Bach's St. John Passion

Some thirty members gathered in the crypt of St. Paul's on a warm Spring afternoon for a guided tour of the less visited upper Triforium galleries of the cathedral. Enthusiastic and knowledgeable guides took us along the rather gloomy massive galleries to view Wren's library and the room with his Great Model, constructed to win over the Parliamentary Committee of "incompetent judges" to his third design. The Library contains mainly works of theology and perhaps some ancient dust from earlier centuries.

From look out points in the gallery we marvelled at the long view down the cathedral and held on tight while looking down the Geometric Staircase, a nice application of elementary mechanics and mathematics.

Roger Walkinton, a Sussex graduate who suggested and organised the visit, now works for the Cathedral. He had reserved for us the best possible seats for Bach's *St John Passion*, a few

yards from the conductor of the orchestra and soloists, and immediately under the glorious dome. The setting heightened the emotional impact of this sublime work with a fine performance by the London Mozart Players and the Cathedral Choir and soloists.

Altogether a visit of fascinating architectural interest and a marvellous musical experience. Many thanks to Roger and Jennifer!

Peter and June Bushell

Publications by retired staff

Many retired staff at Sussex continue their scholarly work. Some of their activities and publications are listed below. Please let members of the steering committee know of any omissions so that we can keep a complete list.

Maggie Boden

M Boden, *Creativity and Art: Three Roads to Surprise*, Oxford University Press

Ben du Boulay

Benedict du Boulay, Katerina Avramides, Erika Martinez-Miron, Genaro Rebolledo Mendez, and Rosemary Luckin, Towards Systems that Care: A Conceptual Framework Based on Motivation, Metacognition and Affect. *International Journal of Artificial Intelligence in Education*, 2010, **20**(3): 197-229.

Benedict du Boulay, Julie Coultas, Rosemary Luckin, and Fred Garnett. Factors Determining the Overall Effectiveness of E-learning Systems Used in Higher Education. In Slavomir Stankov, Vlado Glavinic, and Marko Rosic, eds, *Intelligent Tutoring Systems in E-Learning Environments: Design, Implementation and Evaluation*, . IGI Global, 2010, 303-326.

Mohd Zaliman Mohd Yusoff and Benedict du Boulay, A tutoring system using an emotion-focused strategy to support learners. In Proceedings of the 18th International Conference on Computers in Education, Putrajaya, Malaysia, 2010.

Siti Soraya Abdul Rahman and Benedict du Boulay, Learning programming via worked-examples. In *Proceedings of PPIG-WIP*, Dundee, 2010.

Charles Goldie,

C.M.Goldie, Rosie Cornish and Carol L. Robinson, Applying coupon-collecting theory to computer-aided assessments, in *Probability and Mathematical Genetics: Papers in Honour of Sir John Kingman*, ed. N. H. Bingham and C. M. Goldie, pp. 299-318. *London Math. Soc. Lecture Note Series* **378**, Cambridge Univ. Press, 2010.

N. H. Bingham and C. M. Goldie (eds), *Probability and Mathematical Genetics: Papers in Honour of Sir John Kingman*, xviii + 528 pp. *London Math. Soc. Lecture Note Series* **378**, Cambridge Univ. Press, 2010, ISBN 978-0-521-14577-0.

Jim Hanson

J. R. Hanson, *Science Progress*, 2010, **93**, 171-180. Natural products from the hallucinogenic sage.

J. R. Hanson, *Natural Product Reports*, 2010, **27**, 887-899. Steroids: partial synthesis in medicinal chemistry.

J. R. Hanson, *The Biochemist*, 2010 (4), 30-32. Classics of cholesterol biosynthesis.

C. Uyanik, A. Malay, H. B. Sonmez, L. Quevdrue, J. R. Hanson, *Collect. Czech. Chem. Commun.* 2010, **75**, 463-470. Methanolysis of 3 β -substituted 4,5-epoxyandrostanes catalysed by tetracyanoethylene.

Mike Lappert

P. B. Hitchcock, M. F. Lappert, G. Li, *Inorg. Chem. Acta* 2010, **363**, 179-183. Synthesis and structures of lithium salts of two cluster iodoarsenate(II)s and a periodohexaantimonate(III).

P. B. Hitchcock, M. F. Lappert, G. Li, *Inorg. Chem. Acta* 2010, **363**, 1230-1235. Synthesis and characterisation of the dinuclear β -dialdiminatobismuth(III) dihalides.

M. P. Coles, P. B. Hitchcock, A. V. Khvostov, M. F. Lappert, A.V. Protchenko, *Dalton Trans.*, 2010, 6426-6433. Crystalline di- or tri-anionic metal(Al, Sm) β -diketiminates.

M. P. Coles, P. B. Hitchcock, A. V. Khvostov, M. F. Lappert, Z. Li, A.V. Protchenko, *Dalton Trans.*, 2010, 6780-6788. Crystalline amidocerium(IV) oxides and a side-bridging dioxygen complex.

Larry Lerner,

Reading Women's Poetry Sussex Academic Press 2009 (a small academic press quite unconnected with the University)

Laci Löb

His *Dealing with Satan: Rezső Kasztner's Daring Rescue of Hungarian Jews* (2008) was shortlisted for the Wingate Prize in 2009. In 2010 it was published in Hungarian, Chinese and German. He presented the Hungarian version at the Holocaust Memorial Centre in Budapest in January. The German version was received with great interest by the media (some 30 interviews and articles in the press and several appearances on television and radio) as were the lectures he gave on it in September at the Bergen-Belsen Memorial, the Centre for Contemporary History (Hamburg), the Topography of Terror Foundation (Berlin), the Institute for Advanced Studies in the Humanities (Essen), the Jewish Museum in Frankfurt, the Jewish Community of Munich, the Domsingschule Aachen and, as guest of honour, the Hansa-Gymnasium Hamburg-Bergedorf.. Under the title "Murdered for Saving Lives" he gave the Holocaust Memorial Lecture at the Centre for the Study of Jewish-Christian Relations in the University of Cambridge.

John Nixon

S. B. Clendenning, P. B. Hitchcock, G. A. Lawless, J. F. Nixon, C. W. Tate, *J. Organometal. Chem.*, 2010, **695**, 717-720. Differences in the η^1 -ligating behaviour of 2,4,6-tritertiarybutyl-phosphabenzene $\text{PC}_5\text{H}_2\text{Bu}^t_3$ and 2,4,6-tritertiarybutyl-1,3,5-triphosphabenzene $\text{P}_3\text{C}_3\text{Bu}^t_3$.

C. W. Tate, P. B. Hitchcock, G. A. Lawless, L. Nyulászi, Z. Benkő, J. F. Nixon *C. R. Chimie*, 2010, **13**, 1063-1072. Structural and bonding aspects of molybdenum tricarbonyl complexes of 2,4,6-tritertiarybutyl-1,3,5-triphosphabenzene, $\text{P}_3\text{C}_3\text{Bu}^t_3$ and some $\lambda^3, \lambda^3, \lambda^5$,- and $\lambda^3, \lambda^5, \lambda^5$, -alkylated derivatives.

He also gave the plenary lecture at the 7th European workshop on Phosphorus Chemistry in Budapest, 28th March 2010

Jennifer Platt,

'Transatlantic voyages and national sociologies', pp. 53-67 in Cherry Schrecker, ed. *Transatlantic Voyages and Sociology: the Migration and Development of Ideas*, Ashgate 2010.

'Sociology', pp. 102-135 in Roger E. Backhouse and Philippe Fontaine, eds. *The History of the Social Sciences since 1945*, Cambridge University Press 2010.

Material on ISA presidents placed on ISA web site.

Papers refereed for: Canadian Journal of Political Science; American Journal of Sociology; Sociological Theory; History of the Human Sciences.

Grant proposals refereed for Czech Science Foundation; ESRC (NCRM node)

Conference participation: World Congress of Sociology – session organised and paper given.

Associational activity: Elected Vice-President for Publications, International Sociological Association, 2010-2014.

Jenny Shaw

Shopping: Social and Cultural Perspectives, Polity Press.

Robert Smith

M. G. Edmunds and R. C. Smith, Bernard Pagel's universe: galaxies and the elements, a meeting report. *Astronomy and Geophysics*, 2010, **51**, 1.13-1.17.

Z. Cano and R. C. Smith, Does the RR Lyrae variable DY And show the Blazhko effect?, *Observatory*, 2010, **130**, 11-16, (Corrigendum: p.196).

In 2010 he completed a five-year appointment as external examiner for the undergraduate degrees in the Physics and Astronomy Department at the University of Nottingham. He also published book reviews in *Contemporary Physics* (2), *Notes and Records of the Royal Society* (1) and *The Observatory Magazine* (2).

James Thomson

9th Nov. 2010, Historical Archive of the City of Barcelona, public lecture entitled “De la manufactura d’indianes a la moderna indústria d’estampats.”

“El cotó a Barcelona: 1780-1840” within a seminar on Barcelona history

“The Calico-Printing Industry at Barcelona, 1730-1850”.

Louise Westwood

V. Roelcke, P. J. Weindling, L. Westwood, *International Relationships in Psychiatry: Britain, Germany and the United States to World War II*, University of Rochester Press, Rochester NY, 254pp, 2010.

Donald Winch

‘Henry Sidgwick and Economic Socialism’ in *Economic Theory and Economic Thought: Essays in Honour of Ian Steedman*, Routledge, 2010, pp. 314-331.

‘R. D. Collison Black, 1922-2008: A Personal Tribute’, *History of Political Economy*. 42:1, March, 2010, pp. 1-17.

‘Wild Natural Beauty and the Religion of Humanity: Mill’s ‘Green’ Credentials’ in *John Stuart Mill - Thought and Influence: The Saint of Rationalism* Georgios Varouxakis and Paul Kelly, eds. Routledge, 2010, pp. 57-66.

‘The Old Generation of Economists and the New; An Intellectual Historian’s Approach to a Significant Transition’, *Journal of the History of Economic Thought*, 2010, **32**, 23-37.



Introduction to new edition of John Maynard Keynes’s *Essays in Biography*, Palgrave Macmillan, 2010, pp. xx-xli.

Miscellaneous

Last year Jenny Shaw wrote a piece on 'An Artist's Open House' as part of the Brighton Festival. Her house at 37 Park Crescent will be open again this year and she will welcome visitors between 12.00 -18.00 during four weekends starting on 7-8 May.

Luke Martell has asked us to remind retired staff who are associated with the UCU that the Annual General Meeting will be on 25 May at 1 pm in Arts C133. More information can be found at <http://www.sussex-ucu.org.uk/>.

Since 1996 the Suss-Ex Club has archived obituaries of members of staff on its website. As a contribution to the 50th Anniversary of the University, it plans to extend the collection to include those who died before 1996. If you have references to, or would like to write, obituaries for people you knew please get in touch with Charles Goldie or David Smith.

 **Theatre Trip booking forms** 

Please be sure to submit these forms to Jennifer Platt by June 2nd.

Alarms and Excursions	Mon. Aug, 1, 7.45	Tues Aug. 2, 7.45	Weds. Aug 3, 7.45	Thurs. Aug. 4, 2.30	Thurs. Aug. 4, 7.45	Sat. Aug. 6, 2.30
Date & time OK?						
Preference?						
How many?						
Dinner?						

Pitmen Painters	Mon. Aug. 29, 7.45	Tues. Aug. 30, 7.45	Weds. Aug 31, 7.45	Thurs. Sep 1, 2.30	Thurs. Sep 1, 7.45	Sat. Sep 3, 2.30
Date & time OK?						
Preference?						
How many?						
Dinner?						

Name:

E mail and/or postal address:

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SUSS-EX CLUB
Talk and supper with Professor Harry Kroto FRS
'La Créativité sans Frontières'

6 for 6.30pm, Friday 17th June 2011 in Conference Centre, Level 3, Bramber House,
University of Sussex

After Harry came to Sussex in 1967 he worked on the borders between chemistry, physics and astronomy and together with colleagues discovered a new form of carbon. This was recognised by them being awarded the Nobel Prize for Chemistry in 1996. He set up the Sussex-based Vega Trust to present science to non-scientists and to preserve words and images of scientists for historical record. He left in 2004 for Florida and continues to be active in research and lecturing on the role of science in society. This talk will interest non-scientists as well as scientists and will be in English!

Welcome drinks will be served in the Conference Centre lounge at **6pm**, with Harry's talk starting at **6.30pm**. This will be followed by a buffet supper (including drinks) for those who would like to stay, at which there'll be plenty of opportunity to catch up with friends and former colleagues.

Please complete this form and return with cheque or credit/debit card details **by the end of May** to: Jackie Fuller, 21 Pelham Square, Brighton, BN1 4ET. Alternatively, if paying by card, the form with card details can be returned by email to Jackie at: jkfuller21@hotmail.com

Your Details

Name.....
Address.....
Phone number..... Email address:

Booking Details

Please book ..place/s at £25 (welcome drink, talk and buffet supper including drinks with the meal) £.....
Please book.....place/s at £5 (welcome drink and talk only) £.....
Total £.....
Any dietary restrictions?

Payment Details

I enclose a cheque for £..... (payable to **University of Sussex**).

Please charge my debit / credit / Maestro card (indicate which) with £.....

Card Type (Visa, Mastercard, Maestro etc)

Card number

Valid fromto Maestro issue number.....

Security Code..... (last 3 numbers on signature strip on reverse of card)

Name on card..... Signed.....

In case of any query, Jackie Fuller can be reached on (01273) 688538 or jkfuller21@hotmail.com