

THE SUSS-EX CLUB

NEWSLETTER No. 47, Late spring 2019

Edited by Adrian Peasgood

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FORTHCOMING EVENTS

Wednesday, 29 May
Royal Pavilion Gardens

A tour of the Royal Pavilion Gardens with the Head Gardener, Robert Hill-Snook. I believe that Robert is retiring this year so it could be your last chance to enjoy this tour. It will start at **10.30am on Wednesday, 29 May**. Please try to arrive ten minutes beforehand, meeting outside the main entrance of the Museum. Depending on the weather, we can after the tour have an early lunch/coffee at the outdoor cafe in the Pavilion Gardens.

To reserve a place(s) either email me at S.P.C.Pavey@sussex.ac.uk, text me at 07742 528945, or call me on my landline (leave a voicemail if no reply) at 01273 822684). We will need to limit numbers to a maximum of 20 people so do reserve your place early. There is no formal charge for the tour but I have proposed to Robert that our group make a contribution to the Garden Fund. I suggest therefore that I collect £5 in cash from each of us on the day.

Information about the garden, which is maintained on organic guidelines using natural planting techniques and organic compost without using any chemicals, is on the Royal Pavilion website at <https://brightonmuseums.org.uk/royalpavilion/whattosee/garden-and-estate/>

Steve Pavey

July
'All the King's Horses'

A curator's tour with Dr Alexandra Loske to see her new exhibition in Brighton Museum. This is '**All the King's Horses - the story of the Royal Stables and Riding House**'. Alexandra's previous tours have been very popular and those of you who have been to her talks/lectures will know what an excellent speaker she is. The date is to be confirmed but we hope to do this in July. More information on the exhibition is at <https://brightonmuseums.org.uk/brighton/exhibitions-displays/all-the-kings-horses-the-story-of-the-royal-stables-and-riding-house/>.

Steve Pavey

October

Seafront visit and supper

The planned May event around the i360 (talk by Fred Gray about the history of the seaside, trip on the i360, and optional fish and chip supper in the Regency Restaurant) has had to be postponed as Fred is away on various study trips as well as meeting a publisher's deadline for completion of his latest book. We now hope to run the event in the first week of October; please make a note in your diaries.

Steve Pavey

RECENT EVENT

Friday, 22 March

'The future of the University'

Suss-Ex's occasional series of evening events, featuring a talk followed by supper, continued on 22nd March. We were privileged to hear Sussex's own Vice-Chancellor, Professor Adam Tickell, speak about "The future of the University". We were treated to an inside view. In the face of unprecedented uncertainty, Sussex University is well placed to cope and indeed to take advantage of whatever situation develops. But hard times and hard choices are ahead. Although the past decade did not feel like a time of generous funding, it was likely to be so in comparison with what is to come.

Charles Goldie

OBITUARY

Ruth Rogers, 27th August 1927 – 17th February 2019



Ruth at Sussex in 1968

My friend and colleague Ruth Rogers, who has died aged 91, was a mathematician deeply involved with solving important engineering problems. Her main area of interest was in fluid mechanics, and in particular rotating fluids—a meeting point between engineering and meteorology. Rotating fluids play a significant role in the Earth’s weather system, which is driven by a combination of rotation and temperature gradients created by the sun’s radiation. For these rotating flows, the non-linear Navier-Stokes equations, which are the fundamental equations for all fluid mechanics, can be reduced to a simpler system of linear equations.

Much of the flow inside the internal cooling-air systems of gas turbines is also driven by rotation and temperature gradients. Rotating fluids therefore constitute an important meeting point between engineering and meteorology, and it was there that Ruth was able to make some of her most valuable theoretical contributions. She collaborated with a number of engineers at the University of Sussex, and this led to the publication of two research monographs and a number of important papers. Her work underpinned many of the theoretical models that are now used by engineering designers in most of the world’s leading gas turbine companies.

Ruth was born on the 27th August 1927 in Kingston upon Thames, where she attended Tiffin’s School for Girls from 1937 to 1941 and—after her parents moved to London—Chiswick County Girls School from 1941 to 1945. Her early sporting interests were cycling, walking and rowing, and her hobbies included classical music and reading detective novels. She was an only child whose parents were Plymouth Brethren, but she rejected their religion and became an atheist for several years before being confirmed in her 30s in the Church of England, where she later became a lay reader.

At Queen Mary College, London, she was awarded a BSc in mathematics and physics in 1948 and a PhD, researching in dynamic meteorology, in 1953. After leaving QMC, she lectured at the Universities of London and Manchester and at the University College of Wales as well as working

for three years as a senior scientific officer at the Royal Aircraft Establishment, Farnborough. However, it was at the University of Sussex that she spent most of her academic career, starting in the School of Mathematics as a Lecturer in 1962, which was the second year of the University's foundation, later becoming a Reader. At the time of her appointment, Ruth was one of only two female academics in the new science faculty.

The 1960s were the halcyon days for Sussex, which was briefly known as Oxbridge by the Sea, and all undergraduate mathematics, science and engineering degree courses shared a common two-term foundation course. This meant mathematicians teaching their subject to engineering students, and Ruth had the ability to make mathematics relevant and interesting to many cohorts of young engineers. The common foundation course was inevitably doomed to failure by the increasing demand for more specialist engineering courses, and Ruth subsequently moved across into the School of Engineering and Applied Sciences, as it was then known.

Her knowledge and interest in rotating fluids made her a natural partner for research with academics in the Thermo-Fluid-Mechanics Research Centre (TFMRC) at Sussex, where the main application of the research was in the design of gas turbines. She took early retirement in 1982, in the first wave of cuts to university funding by the Thatcher government: Sussex took an 18% reduction in its government income, which led to the loss of a large number of experienced and well-qualified academics. Ruth continued to teach part-time, and she carried on her research collaboration and publication for many more years, with the second of her two co-authored monographs on flow and heat transfer in rotating-disc systems published in 1995.

In her later years, Ruth devoted much of her time to family genealogy and to St Anne's Church in Lewes, where she transcribed and catalogued all the church's inscriptions, some of which are now illegible. The vicar commented that her analytical skills led to deeply thought-out sermons and "She always showed her working".

Ruth passed away on 17th February 2019 after a short illness. She is survived by four second-cousins.

Mike Owen

The University *Bulletin* publishes obituaries. The following have appeared since the last issue of the Suss-Ex Newsletter:

Dave Newell (*Bulletin*, 15 March)

George Craig (*Bulletin*), 5 April)

The Suss-Ex website

More information about Suss-Ex is available on its webpage at <http://www.sussex.ac.uk/suss-ex/>. 'Suss-Ex Club' in Google will get you there, as will <http://tiny.cc/sussex>, or you can find us in the A-Z on the University's homepage. The website has copies of past Newsletters.

The steering committee

Suss-Ex activities are organised by a steering committee, which currently comprises:

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Ideas for the future

We are always seeking ideas for social occasions when we can meet former colleagues. Please let us have your suggestions, or volunteer to join the committee. We meet once a term, when practicable immediately before a Suss-Ex event.