

WHS AGM 7 March 2020

CHAIRMAN'S REPORT

We were very sorry to lose over the past year two people who have had very important roles in the creation and development of the Society. Professor Francis Ring, our Chairman for many years, died in his sleep on 15 July 2019 after a long illness. There is an account of his contribution to the Society in the autumn issue of the Journal, and I spoke along similar lines at the celebration of his life organised by his colleagues at the Min on 16 August. Then, on 19 November, Fred Schlesinger also died. Fred had been our Treasurer for many years, and had been much involved in the musical side of our activities. There is an account of Fred's contribution in the Spring issue of our Journal. We will miss them, both for themselves, and for their depth of their knowledge of the Herschels and the Society's history.

Our lecture programme continues to thrive, with all but one as usual being delivered as one of Bath's Royal Literary and Scientific Institute's themed lecture series. Tony Symes, our lecture organiser, looks after the programme very effectively. You can see the detail in his report at Annex A

This was the second year of the Caroline Herschel Prize Lectureship. We replicated the first year process with some minor adjustments, leading to a very well received Lecture by the 2019 winner, Dr Anna Lisa Varri, at the University of Bath on November 26, and repeated a month later at the RAS in London. There have been some signs of wider beneficial impacts of this process, and we are seeking to build on these.

By mutual agreement, Bath Astronomers, which used to operate as a virtual organisation within our Society, has now become a Society in its own right, though still with a close association with us, and still acting as our observing partner. Simon Holbeche, the Chairman of the new organisation will say rather more about this later.

The Starlit Skies activity has continued to develop, with another successful conference at BRLSI in June 2019. Since then, we have refocused our activities somewhat to widen membership of the Alliance and operate more sustainably. We are in discussion with the local authority, have presented to residents associations, and have joined forces with CPRE and the Commission for Dark Skies on proposing a panel discussion at the National Astronomy Meeting at the University of Bath in July. One of my Committee colleagues, Dr Bob Fosbury, has joined the group, and is assembling important work on the impact of artificial light on people, animals, and our environment.

The main focus of our music representative, Dr Matthew Spring of Bath Spa University, has been to progress the first digital catalogue of Herschel's music, using data from US sources funded by the Society. An update on this and other developments is at Annex B .

We continue to work closely with the Herschel Museum, and the BPT on a variety of issues, to the benefit of both of our organisations. Claire Dixon, BPT Hd of Museums, will be reporting on that later.

Tony Symes had just fully taken over editorship of our Journal at the time of Francis Ring's death, and was still relying on Fred Schlesinger's continuing role on the production side, so Fred's death later in the year has meant that Tony has had to pick that aspect of the process as well. The Spring 2020 issue of the Journal will be a test of how practical it will be to carry on in this way.

Simon Holbeche has continued to run our membership arrangements very efficiently through Membermojo. His report on membership numbers is at Annex C

Jim Foreman has been a very organised and hard-working Society Secretary, and continues to run our website and social media accounts very efficiently. At the turn of the year our Facebook Group had 55 members and our Twitter account had 331 followers.

My thanks to those mentioned above and all committee members for their contributions over the past year.

We do have two proposals for changes – one on the Society's name, and the second on our membership fees – that require agreement at this AGM, and these are addressed in separate papers under their own agenda items.

Charles Draper

Chairman

ANNEX A

WHS Lecture report for 2019

(By Tony Symes)

In 2019 we managed a programme of 8 lectures. Dr Victoria Scowcroft's lecture "Beacons in the Night: Mapping the Universe with Variable Stars" had to be rescheduled from February to May because of snow. We started and ended the year with lectures on the Moon Landing to celebrate the 50th anniversary of the event.

Average attendance was similar to last year. The yearly figures are:

Year	2014	2015	2016	2017	2018	2019
Lectures	10	9	8	7	9	8
Attendance	40	41	56	57	51	50

Hasselblad and the Moon Landing

Date: Friday 4 January 2019.

Lecturer: Deborah Ireland.

Attendance: 82

A very well attended lecture which drew in an impressive number of visitors paying the increased £5 admission charge. We learned much about both the development of space photography and the details of space exploration of the 50s and 60s which even those of us who were alive at the time would have difficulty in remembering. Deborah Ireland sold and signed copies of her book at the end of the lecture.

The WHS Annual Lecture – Herschel: A Space Observatory's legacy

Date: Friday 1 March 2019.

Lecturer: Dr Chris North, University of Cardiff

Attendance: 45

This lecture echoed the theme of the Herschel Museum which is "Invisible Light" or infrared. Chris North took us through the development and positioning of the Herschel Space Observatory, its remarkable images which demonstrated the ability of infrared to penetrate clouds of dust and show us the star forming regions which are hidden from visible light. He finished by discussing the proposed successor – SPICA which is currently in competition for funding.

Variety in Astronomical Orbits

Date: Friday 5 April 2019.

Lecturer: Professor Mark Birkinshaw, University of Bristol

Attendance: 34

This lecture attracted the more academic of our members and provided an excellent overview of current thinking about gravitation and orbits. This included black Holes, Lagrange Points, Roche Lobes (the region around a star in a binary system within which orbiting material is gravitationally bound to that star, typically a tear-drop shape) and the problems of navigation. All the predictions of Einstein's General Theory of Relativity are still consistent with all observations in this field to date.

Beacons in the Night: Mapping the Universe with Variable Stars

Date: Friday 10 May 2019.

Lecturer: Dr Victoria Scowcroft, University of Bath

Attendance: 55

This was the postponed (snowed off) February Lecture.

Dr Victoria Scowcroft, who is a Lecturer in Astrophysics at the University of Bath, discussed the vast contributions that variable stars have made to astronomy and cosmology. She described how variable stars are used to create three-dimensional maps of nearby galaxies, revealing new details about their structure and evolution. She discussed the advances in cosmology brought about through variable star studies, such as Hubble's discovery of the expanding Universe, the discovery that this expansion is accelerating, and what this tells us about the ultimate fate of our Universe.

Exploring the Properties of Extreme Matter using Gravitational Waves and Gamma Ray Bursts

Date: Friday 6 September 2019.

Lecturer: Dr David Tsang, University of Bath

Attendance: 38

David Tsang is a Lecturer in the department of Physics at the University of Bath specializing in theoretical astrophysics.

The lecture was a fascinating tour through some of the most extreme events in the cosmos such as neutron stars merging and how we can detect them. He enlivened the lecture with some of the best animations that we have seen.

Joint WHS & BIS Lecture: William Herschel and the Rings of Uranus

Date: Friday 4 October 2019.

Lecturer: Dr Stuart Eves.

Attendance: 39

Stuart Eves is a satellite-system engineer. In 2018 he formed his own space consultancy company, SJE Space, after spending 14 years with Surrey Satellite Technology Limited (SSTL) and 16 years with the UK Ministry Of Defence. He has been a fellow of both the Royal Astronomical Society and the British Interplanetary Society for more than 25 years. In the lecture he presented a very plausible story of how William Herschel could have seen the rings of Uranus, drawing attention to some intriguing sketches that WH made and finding a whole lot of factors that could have made the rings both more prominent and more easily observed in the late 1700s. The lecture was full of interesting points. A longer summary of this lecture is in the Spring 2020 edition of the WHS Journal (19.1).

The Caroline Herschel Prize Lecture: Small stellar systems, big astrophysical questions

Date: Tuesday 26 November 2019 at Bath University.

Lecturer: Dr Anna Lisa Varri, University of Edinburgh.

Attendance: 62+

Dr Anna Lisa Varri gave a lecture packed with information and quite a few equations about the study of small stellar systems like globular clusters and the forces that hold them together for time spans up to twelve billion years. There is a link to the video recording of this lecture on the home page of the [William Herschel Society](#) website.

Moon: Art, Science, Culture.

Date: Friday 6 December 2019.

Lecturers: Dr Robert Massey & Dr Alexandra Loske.

Attendance: 44

Dr Robert Massey is Deputy Executive Director & Press Officer of the Royal Astronomical Society and Dr Alexandra Loske is an art historian associated with the University of Sussex and now the curator of the Royal Pavilion in Brighton. They collaborated on the book with the same title as the lecture.

They gave an entertaining joint lecture to mark the 50th anniversary of the Moon landing in which they talked about how our obsession with the Moon has manifested itself in the sciences and visual arts, from earliest ritualistic drawings and objects, Romantic symbolism and silent movies, to scientific observation, photography, and space race propaganda.

They signed copies of their book for those in the audience who purchased one, and donated copies to the BRLSI library and to the Herschel Museum of Astronomy.

ANNEX B – MUSIC

(By Matthew Spring)

1. Eighteenth-century Study Day at The Foundlings Museum, London 29 Nov 2019

I gave a half hour paper with slides title 'Herschel in the Gardens' at this well attended event. The paper concentrated on the summer of 1778 and the music Herschel composed for the spring gardens. I have put the abstract below. At the conference day I was approached by a delegate and Herschel enthusiast who has transcribed and edited Herschel's symphonies and would be interest in have them made available through the Society's website – possibly as an addition to the Herschel Music Archive Project. He was going to contact me but has not done so yet. I will follow this up through the Foundlings Hospital who will have his contact details.

2. Herschel Music Archive Project (HMAP)

Matt Dicken and I have continued to input data into the catalogue. We had a meeting on the 20th November with Miranda Barnes at Bath Spa and have another on 22nd January. One problem with have is that the system as constructed does not easily allow Matt and I to work in a complementary manner on the database. We hope to resolve this so that material that Matt puts can be added to or altered by me.

3. July 2020 Royal Astronomical Society Conference in Bath.

Following a meeting in the autumn it was suggested that there could some form of musical entertainment based around Herschel's musical life in Bath. This can be done but clarification on what funds might be available is needed. It was also suggested that an optional Herschel walk around Bath could be offered during week.

Abstract for paper on Herschel in the Gardens

2017 year saw the 350th anniversary of William Herschel's arrival in Bath to take up the post of organist of the newly opened Octagon Chapel. Bath was to be Herschel's home for some 15 years until his final removal to Slough to take up the post created for him as Astronomer Royal to George III. During his Bath years he was a major player in most of the musical activity in the city – becoming director of concerts at the New Assembly Room at Linley's departure in 1776. Following his falling out with Linley in 1772 Herschel looked for other avenues for his musical enterprises. One was his rival concert series in the Lower Rooms and another his work in Bristol. The subject of his talk however is a third avenue and one that has been little comment on to date; his development of the Spring Gardens as a venue for summer season concerts. One could argue that the success of this venture was Herschel's longest lasting musical legacy as Bath's garden gala concerts continued throughout the nineteenth century - long after the season of balls and subscription concerts had ceased.

In the 1960s much of Herschel's surviving music was divided up and sold off - with the concertos going to Berkeley California and the symphonies going to The British Library. A third set, that included some of his vocal music, went to Cambridge University. Here we find

a varied collection of music of that includes 21 items in a set of parts in Herschel's own hand, some with separate scores, and a further collection of miscellaneous works. Most of the music is vocal but, along with a cappella glees, catches and madrigals for 3 to 5 voices, are a number of larger scale pieces for voices and a band strings in 4 parts, plus 2 oboes (or flutes) and 2 horns. This music clearly relates to his work in Bath's gardens. The opening piece is titled 'The Spring Garden Concert' and the 14th item is his celebrated 'Echo Catch' for 4 voices and full band which we know was very popular in the gardens. This talk charts Herschel's activities in Bath's gardens and considers the contents of the Cambridge College and how it might have been used in the context of the audiences in Bath's gardens.