

Society for the History of Astronomy

Volume 16, no.4, Nov 2024

Editor: David Sellers

Royal Observatory heritage under threat? HERSTMONCEUX and GREENWICH



The entrance to The Observatory Science Centre at Herstmonceux, May 2023 (photo: D.Sellers)

HERSTMONCEUX

For forty years Herstmonceux Castle, in East Sussex, was the home of the Royal Greenwich Observatory. When the RGO moved to Cambridge in 1990, the Castle along with its extensive grounds—accommodating the six green domes, known as the 'Equatorial Group'—was sold. It is now owned by Queen's University, Ontario, Canada, and is used as an International Study Centre (Bader College) by the University. The Observatory Science Centre (OSC), including the Equatorial Group, has been open to the public since 1995 (see photograph above).

The University has recently made the decision to close portions of the castle and suspend Bader College operations to the end of the 2024-25 academic year, in order to facilitate urgent and extensive repairs to the fabric of the castle. Also, earlier this year the Board of Trustees of Bader College decided not to renew a long-term lease with the Observatory Science Centre when

its lease of the observatory buildings at Herstmonceux expires in 2026. This has raised fears in the UK that future public access to the site—an important part of our astronomical heritage—is in jeopardy.

Queen's University has issued a statement (updated on 3 Sep 2024) saying that it "will soon be embarking on a full operational and strategic review concerning the future orientation and sustainability of the college, the buildings, and the Herstmonceux property on which they are located. We anticipate it will take a considerable amount of time to complete this work." It has also pledged that "the University values and is committed to preserving the estate's historic sites, including the telescopes, domes, and observatory buildings, which make up vital parts of the estate's heritage. We will continue to abide by all requirements associated with its ownership and long-term care". No indication has been given as to whether that includes continuing visitor access to the historic telescopes and domes.

SHA website: http://www.shastro.org.uk/



Herstmonceux Castle. Between 1948 and 1990 this was the base for the Astronomer Royal and the Royal Greenwich Observatory (photo: D.Sellers)

In October 2000 a Heritage Fund award of £815,500 was made for the conservation of the Herstmonceux Observatory Buildings & Telescopes.

A Facebook group, 'Save Herstmonceux Observatory' has been set up as a hub for public communications and campaigning against the potential loss of public access. Similar forums have been set up on X and Instagram.

An online petition can be signed.

GREENWICH

In a separate development, <u>significant works</u> are proposed at the Old Royal Observatory in Greenwich Park. The proposal is for "Full Regeneration of the Royal Observatory Site including (but not limited to) demolition of the existing single storey ticketing office, installation of new entrance pavilion on the eastern perimeter of the site with supported garden walk structure; installation of an external elliptical access stair to the Great Equatorial Building, including new lift and overrun within the Meridian Building; extending the planetarium lobby to create new science engagement space, and connecting to the South Building façade"

The plans (ref: 24/2640/F) and the associated 'Heritage Statement and Impact Assessment (Jul 2024)' can be downloaded via the planning portal of the Royal Borough of Greenwich.

One of the biggest concerns of historians of astronomy is that the building referred to merely as "existing

single storey ticketing office", is actually on the site of, and incorporates some of the fabric of, Flamsteed's original Quadrant House and Sextant House.

This was the building from which he made the first of the renowned celestial measurements, which were of such importance for the progress of navigation and science (being used by Newton, amongst others).

The SHA and the Royal Astronomical Society have submitted objections to the planning authority.



The Meridian Buildings at the Old Royal Observatory, Greenwich (photo: D.Sellers)

FUTURE SHA MEETINGS

2025 MARCH - PARIS CONFERENCE

28-30 March 2025: A repeat joint conference in Paris with the Historical Commission of the **Société Astronomique de France (SAF)**. Previous joint conferences with our French sister organisation took place t the Paris Observatory (2017) and at Oxford University (Apr 2019). The provisional programme is:

Day 1: presentations by members of the SHA and the SAF History Commission at their headquarters in Paris (Rue Beethoven), with a break to observe the partial solar eclipse.

Day 2: Visit to the Camille Flammarion observatory at Juvisy (dome, archives room, park, tomb)

A joint formal dinner.

Day 3: Visit to the Museum of Arts et Métiers and a Sundial walk in the Marais district.

2025 SPRING CONFERENCE

This will be on **Sat 26 Apr 2025** at **10 am-4.30 pm**.

Further details to be confirmed in the next issue.

2025 SUMMER PICNIC

It is proposed that the Summer Picnic for 2025 will be at <u>Jodrell Bank</u>. Details to be confirmed in a future issue. For 2026 or 2027, we are looking at holding the summer picnic at Birr Castle in Ireland, the home of Lord Rosse's great reflecting telescope – the 'Leviathan of Parsonstown'.

2025 AGM & AUTUMN CONFERENCE

Further details to be confirmed in a future issue.

ONLINE MEETINGS

Free online evening presentations for members:

22 Jan 2025 8.00 pm

Title: Annus Tenebrosus: the 'Black Monday' eclipse, Faith and Political Fervour in Early Modern England

Speaker: Prof. Anna Marie Roos

The famous total solar eclipse over England in 1652 was surrounded by the political exploitation of popular fear on 'Black Monday' in the mid-seventeenth century. However, although for some an eclipse could be a presage of the world's ending, for others the event

SHA COUNCIL

The current SHA Officers & Council are:

Honorary Council Members

Hon President Dr Allan Chapman **Hon Vice-Presidents** Dr Emily Winterburn, Prof. Mike Edmunds

Council Members

Chair Carolyn Kennett
Vice-Chair (& e-News Editor) David Sellers
General Secretary Mike Leggett
Treasurer Geoff King
Membership Secretary Graham Jones
Editor, SHA Bulletin Kevin Walsh
Publicity Officer Geoff King
Survey Coordinator Kevin Johnson
Online Editor John Chuter
Librarian James Dawson
Meetings/Events Secretary Mike Frost

Co-opted Officers (non-Council)

Editor, The Antiquarian Astronomer Peter Morris **Deputy. Editor, The Antiquarian Astronomer** Ian Ridpath

Archivist John Chuter
Assistant Librarian Carolyn Bedwell
SHA booklet distributor Gerard Gilligan

SHA COUNCIL MEETINGS

The next SHA Council meeting will be on:

Wed 29 Jan 2025, 6.00 pm-9.30 pm (via 'Zoom')

SHA members are very welcome to attend physical Council meetings as observers. Please let the <u>General</u> Secretary know in advance, if you wish to do so.

provided reassurance that the natural cycles of the universe continued in regular, self-sustaining order. The talk will show that the interpretation of eclipses then was caught in a suspension between an understanding of world, life, and human beings ruled by God, the confidence and anxieties of the human mind, and by increasingly measurable scientific knowledge.

Dr Anna Marie Roos is Emeritus Professor of the History of Science and Medicine at the University of Lincoln. She is a Fellow of the Society of Antiquaries of London and of the Linnean Society and author works analysing early modern astronomy.

SHA PUBLICATIONS

SHA e-News

The next issue of the *e-News* is due in early February 2025. If you know of any meetings, publications, exhibitions or events pertaining to the history of astronomy that might interest other members, please email brief details to the Editor (David Sellers).



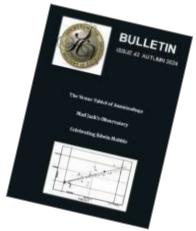
Back issues and guidelines for contributions are available from the *e-News* web page.

SHA BULLETIN

Issue 42 of the *Bulletin* (Autumn 2024) was distributed to SHA members at the end of October. Issue 43 (Spring 2025) is due around April next year.

Contributions to the *Bulletin* are most welcome, including letters which can be on any aspect of the Society or the history of astronomy.

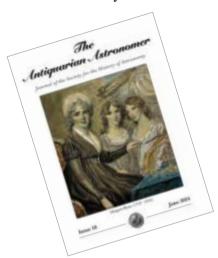
Back issues (except for the last 2 years) and guidelines for contributions are available from the <u>Bulletin</u> web page.



It is usually prudent to check with the <u>Editor</u> (Kevin Walsh) before preparing items where duplication is a possibility (e.g. book or film reviews).

THE ANTIQUARIAN ASTRONOMER

Issue 18 of *The Antiquarian Astronomer was* sent out to all members in early June 2024.



The cover subject is Margaret Bryan, the Georgianera pioneer of women's education. Subjects of other papers include William Rowan Hamilton, second Royal Astronomer of Ireland; an unlikely link between Clapham Common and the speed of light; and the conclusion of Paul Haley's biography of Mary Watson Whitney.

Issue 19 should be published in June/July 2025. Members and others wishing to submit material for future issues of *The Antiquarian Astronomer* should contact the Editor (Peter Morris) at <u>aaeditor@shastro.org.uk</u>. Guidance for authors and some back issues can be found on <u>The Antiquarian Astronomer</u> web page.

Please note that, from issue 19, Ian Ridpath and Peter Morris will be swapping roles as Editor and Deputy Editor respectively. Ian will have edited our much-respected journal for 10 years and the SHA is greatly indebted to him for his work.

SAFEGUARDING POLICY

The SHA Council is currently discussing a draft policy on 'Safeguarding'. Please let Carolyn Kennett or James Dawson (our nominated safeguarding officers) know, if you have any comments or proposals regarding this issue.

Our Society's activities include working with vulnerable people, face to face, and online. The purpose of this safeguarding policy is to protect children and vulnerable adults and provide members, other stakeholders and the public with the overarching principles that guide our approach in doing so.

SHA AGM & AUTUMN CONFERENCE 2024

report by Gerard Gilligan

55 members and guests attended the SHA's AGM and Autumn Conference on Sat 27 Oct 2024, which was held at the BMI in Birmingham.

During proceedings new subscription rates and a revised Constitution were agreed. Full details can be found on the Society website.

The following annual awards were made:

The Peter Hingley Award - to Ian Ridpath for his significant contributions over several years as Editor of the SHA publication *The Antiquarian Astronomer*; The Roger Jones Award – to Timothy Baker for his excellent contributions to the SHA Survey; The Madeline Cox Award – also to Timothy Baker for his outstanding articles for the SHA Bulletin.

There was a video message of welcome from Hon. SHA President Dr Allan Chapman. This was followed by the principal presentations:

Simon Banton on *The Astronomy of Stonehenge* - An illustrated talk on the generally accepted, as well as the more controversial, astronomical alignments of Stonehenge;

Beatrice Steele on A Brief History of Eclipse Expe-

ditions at the Norman Lockyer Observatory. The NLO holds several thousand lantern slides, incuding materials from several late Victorian solar eclipse trips, undertaken by Lockyer and his son Dr W.J.S. Lockyer;

Ellie Evans on *Monitoring Cumbrian Heritage Sites* case studies at Castlerigg Stone Circle and Long Meg Plus Her Daughters Stone Circle. Using a wide range of techniques Ellie shared her PhD research into the monitoring of Cumbrian outdoor heritage sites using drone photography, photogrammetry, and visitor route surveys; and finally,

Mike Frost on *Erwin Finlay Freundlich: Einstein's Collaborator*. Erwin Finlay Freundlich was a friend and co-worker with Albert Einstein as he developed his Theory of General Relativity and was involved in all three tests of the theory. Mike met the grandson of Erwin Finlay Freundlich, Willy Goldschmidt, and with the help of Erwin's family he has uncovered this extraordinary story.

Stalls selling second-hand astronomy books and current SHA booklets did a brisk business.



Conference speakers (l. to r.): Mike Frost, Beatrice Steele, Simon Banton, Ellie Evans (photo: Carolyn Kennett)

SHA LIBRARY NEWS

The SHA library now has almost 3000 books dedicated to the history of astronomy and related subjects, numerous journals, as well as miscellaneous items including letters, meeting programmes, conference proceedings and the like.

Outside the legal deposit libraries, the SHA Library has one of the most extensive history of astronomy collections in any library in the British Isles. It is *unique* in having a collecting policy, totally focused on history of astronomy, that includes not only the latest popular and scholarly works, but also the active acquisition of second-hand books, astronomical ephemera, and the preservation of the works of lesser known British astronomers and authors.

We continue to look for and obtain new items for the Library and a list of the latest acquisitions is given below.

Hastie, William, Kant's cosmogony as in his essay on the retardation of the rotation of the earth and his Natural history and theory of the heavens. With introduction, appendices, and a portrait of Thomas Wright of Durham (1900)

Monk, A., John Franklin-Adams, Astronomer, 1843-1912 - An Observatory at Hambledon (2005)

von Humboldt, Alexander, Cosmos: a sketch of the physical description of the universe, v.5 (1858)

Wilkins, George A., *Library and Information Services in Astronomy*. Proceedings of the 110th Colloquium of the International Astronomical Union held in Washington DC, USA, 26 Jul - 1 Aug 1988 (1989)

Seymour, Percy, Adventures with astronomy (1983)

A donation by Adrienne Skye of several books and other items has been received and is waiting to be sorted. John Chuter has also given me a number of books for the SHA which I also have to sort through and decide which should join the library collection. Thank you. Specific titles which join the collection will appear in subsequent issues of e-News.

David Sellers and Peter Morris have both kindly donated many copies of the *Journal for the History of Astronomy* to fill gaps in the series in the library. I am now just missing one copy which is an edition from 1986 (vol.17, pt.1, nr. 48). If anyone has this edition and is happy to donate it to the Library, I would be most grateful.

In the summer I was contacted by a lady from near Milton Keynes as she had lots of books belonging to her late father, which she wanted to pass on to a good home. Her father was Percival [Percy] Hammond



BMI (Birmingham): home of the SHA Library

who was a retired academic and past president of the Institute of Measurement and Control; he had worked at several institutions including the Royal Radar Establishment in Malvern, at the National Physical Laboratory, Warren Springs Laboratory, and as head of the Computer Aided Design Centre in Cambridge. Percy had thousands of books and I helped his daughter by taking several of the astronomy and physics books, as well as some on engineering and mathematics. I found an academic in Nottingham who wanted the engineering and control system books, and the others have joined the pool of books I sell on at events to raise money for the SHA Library fund. Most of Percy's books on astronomy are either already in the library collection or not suitable (given our space restriction) but there are still a few I need to sort through and decide what to do with. Having read about Percy and having spent time with his daughter, it is a shame I never got to meet him as he sounded like a fascinating and kind individual. I'm grateful to him and to his daughter for their donation.

As I reported in my AGM report, the SHA Library has been out of bounds for the last few months due to work which is being undertaken inside the BMI. I am hoping to get back in the library in December 2024.

The catalogue of books in the library is <u>available</u> and a link to this can be found on the library page of the SHA's <u>website</u> as a downloadable Excel spreadsheet; if you have trouble viewing the catalogue let us know and we can arrange to send it to you in an alternative format.

If you want to know more about the library or its stock, or if you'd like help with your research or finding a book or article, or other library-related matter, please do contact <u>James</u> and <u>Carolyn</u> who would love to hear from you.

James Dawson, SHA Librarian library@shastro.org.uk

SHA RESEARCH GRANTS

SHA *Small Research Grants* are available for the period **1 Nov 2024 to 31 Oct 2025** and applications are solicited. The total amount allocated by the Council for the current round is £1500. These grants are made available to provide limited financial support for members' research.

Links to the <u>application form and regulations</u> for applicants are available on the Society's web site. Applications must be made using the application form. Appended to the regulations are some guidelines for completing the case for support that forms part of every application. The research grants panel consists of: the Chair, vice-Chair, General Secretary, Treasurer and Membership Secretary of the SHA (with powers to co-opt outside advice).

NEW MEMBERS

We are pleased to give a warm welcome to the following new members who have joined since the last issue of *SHA e-News*:

Dr Graham Ryott SOLIHULL

Mr Stephen Strickland LEEDS

Dr Colin Savsell MIDDLESBROUGH

Mr Ashe Loyd WAKEFIELD

Prof Thomas Hockey CEDAR FALLS, IA, USA

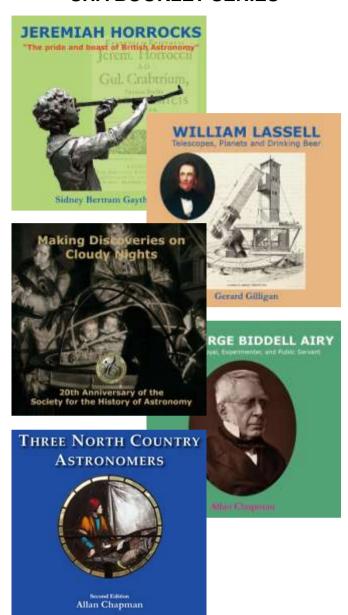
Mr Paul Brocklehurst DISS, NORFOLK

VOLUNTEER A PRESENTATION?

Do you have a mini-presentation that you would like to make to an online SHA meeting? The SHA organises occasional online meetings featuring several short talks, where members can present topics that they have been researching. If you have something up your sleeve and would like to give it a go, please let our Meetings Secretary, know:

Meetings@shastro.org.uk

SHA BOOKLET SERIES



Five titles in the SHA's occasional booklet series have been published so far: One on *Jeremiah Horrocks* (2020, £8), by Sidney B Gaythorpe; one on *William Lassell* (2021, £8), by Gerard Gilligan; one for the *SHA 20th Anniversary* (2022, £10) by various authors; one on *Sir George Biddell Airy* (2023, £12), by Allan Chapman; and most recently *Three North Country Astronomers* revised edition (2024, £8), by Allan Chapman. The prices relate to purchase at SHA events. For further details and mail order costs, please contact *bookshop@shastro.org.uk*.

Other titles in preparation include:

A History of Archaeo-astronomy, by Carolyn Kennett, and The Story of Astronomical Lantern Slides, by John Chuter. If you wish to suggest topics and/or authors for the future, please let the Editor know (<u>David Sellers</u>).

A WORD FROM THE CHAIR



As winter approaches, we've been treated to some wonderful autumn skies over the last couple of months. The sun has been particularly active, with the aurora visible across the UK. I was lucky enough to see it with the naked eye on two occasions—once in the

Isles of Scilly and again in West Cornwall. The second sighting was so bright that it turned the whole sky a deep red, all the way up to the zenith. I hope you've all had a chance to enjoy this celestial wonder (see picture below from St Martin's Island, Isles of Scilly).

The recording of aurora events has a long history, and aurora watching wasn't limited to the scientific community. Even in the southern latitudes of Cornwall, reports of the aurora were regularly made to local papers from the early 1800s. In 1804, a particularly descriptive report appeared in the local *Gazette* newspaper:

"The phenomenon of the Aurora Borealis...displayed its beauties on Monday ...in columns of clear light, issuing at first from a common centre, and shooting up from the horizon eastward. At twentyfive minutes after seven o'clock, one of the columns or luminous rays, had passed the Zenith, emitting in the northern sky numerous coruscations and gradually extending itself into the western horizon. Nearly at the same time, there broke out in the south-east, where before it has the appearance of a very dense black cloud, or nebulae, consisting of small clouds brilliantly illuminated and disappearing as instantaneously as the eye could catch them. On the northern limb of the western column, garnet-coloured flashes, without intermission, darted upwards from the horizon, diffusing their colour along white beams, nearly at times to the Zenith. Those appearances continued for nearly two hours, when the rays became less luminous, much broader and more dispersed, till they gradually disappeared. The weather on the two following days was serene and mild".

—1804 Cornwall Gazette, October 27th

This must have been quite a display for anyone fortunate enough to see it. Nearing the peak of Solar Cycle 5, the activity continued over the following days, with another remarkable display reported on the Lewis and Clark expedition at Fort Mandan, North Dakota USA on November 5th, 1804. William Clark wrote in his journal:

"last night late we wer awoke by the Sergeant of the Guard to See a northern light, which was light, not red, and appeared to Darken and Some times nearly obscered and many times appeared in light Streeks, and at other times a great Space light & containing floating Collomns which appeared opposite each other & retreat leaveing the lighter Space at no time of the Same appearance."

Not all displays were reported in such poetic terms. In 1837, the *Royal Cornwall Gazette* took a more ominous tone after a crimson hue was seen off the coast of St Ives, describing the general appearance as both "*awful as well as beautiful and grand in the extreme*." In a later issue, the paper tried to comfort its readers, suggesting that scientists believed the aurora was most likely due to the reflection of the red atmosphere of Mars!

It was wonderful to see so many familiar faces at the Autumn conference. Looking ahead, the Bulletin magazine will be in the post to you all soon, though it is running a little later than usual. Our last wonderful webinar featured Professor Karen Masters, who spoke about her new book *The Astronomers' Library*. If you didn't have the chance to attend, the recording is now available on our YouTube channel and the book is an excellent addition to anyone's library.

Our next webinar is on Wednesday, January 22nd, 2025. Professor Anna Marie Roos will talk about the 1652 total solar eclipse in "Annus Tenebrosus: the 'Black Monday' Eclipse, Faith and Political Fervour in Early Modern England." Definitely one for your diaries.

Looking forward to 2025, we have many exciting plans in place and want to thank you for your continued support. Your membership is invaluable to us, and we will soon invite you to renew your subscription. By doing so, you ensure your continued participation in all our events and gain access to the many publications and further benefits it offers.

Thank you again for your ongoing support.

Warm regards, Carolyn Kennett, SHA Chair



SHA SURVEY NEWS

In contrast to the spring quarter, summer has brought a large number of contributions for the Survey from a single member of the society. These have come from Timothy Baker, a new member who had an article published on Cavendish and Maxwell in the current issue of the *Antiquarian Astronomer*. These cover a wide range of material, including sites, observatories and astronomers as well as adding to existing Survey entries. Due to the amount of information submitted, which will need checking and editing, I will upload them as a single operation—the process is more efficient if the associated indexes are updated at the same time.

At the time of writing my Survey report, I have edited the Baker submissions for the counties of Berkshire through to Essex. These entirely cover new observatory entries, but have uncovered some new astronomers. In addition, there has been further information added to existing Survey entries. These include greater details of the instruments formerly used at the Mullard Radio Observatory run by Cambridge University. Instruments listed comprise the early radio interferometers built by Martin Ryle and Antony Hewish, and the scintillation array operated by Jocelyn Bell that first discovered pulsars. Other updated entries include the astronomer Thomas Wright (1711-86), who built a tower folly that he used as an observatory—a separate observatory entry will be added later.



A newly procured trophy for the *Roger Jones*Award – given annually for the best contributions to the SHA Survey (Timothy Baker this year)

The following items from the Baker material, which I have already edited, include Lassell's Maidenhead Observatory in the grounds of his Ray Lodge estate. It housed his 24-inch reflecting telescope, first erected at his Liverpool home, before he moved his telescopes to

Malta for better observing conditions. The telescope was subsequently given to the Royal Observatory, Greenwich—the primary mirror survives and is current on display at the Liverpool World Museum. Other notable material includes components of the MERLIN radio interferometer—Darnhall, Wardle and Pickmere radio telescopes. Another addition is the Goonhilly Earth Satellite station in Cornwall that is now used for radio astronomy by a consortium of British universities.

Another notable, and ongoing contribution to the Survey, is the late Bob Halliday who was a prominent amateur astronomer and moving light in the Liverpool Astronomical Society—liaising with Gerard. In addition, SHA member, Philip Barnard has brought to my notice the Kent amateur astronomer and telescope builder, John Linscott. The Ramsgate grocer regularly corresponded with the *English Mechanic* and advertised his telescopes in the same publication.

Kevin Johnson

SHA ON THE ROAD Recent and future publicity events

The Society for the History of Astronomy continues to publicise its activities through events ranging from talks for local astronomical societies through to larger scale events such as astronomy shows. If you know of other forthcoming events at which the SHA might be able to have a publicity stand, or if you'd like materials to use at your local society meetings then please let the Publicity Officer, Geoff King, know via:

publicity@shastro.org.uk.

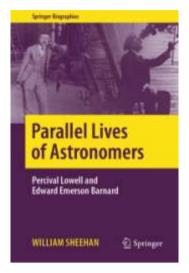
Recent events

The SHA had successful publicity stands on 7 Sep 2024 at Cronton Village Gala and **11 Oct 2024** at the **Croxteth Star Party** (both in Liverpool and run by Gerard Gilligan). Over 200 people attended the latter event.



FORTHCOMING BOOKS NOTICED

Parallel Lives of Astronomers: Percival Lowell and Edward Emerson Barnard, by William Sheehan (Springer), Nov 2024, pp. 687 (hardback, £44.99), ISBN 9783031687990



Using the "Parallel Lives" approach adopted by the Greek biographer Plutarch, noted historian of astronomy William Sheehan contrasts the lives and research careers of two famous astronomers, Percival Lowell and Edward Emerson Barnard. Drawing on vast archival materials and hitherto unpublished source materials, Sheehan documents in

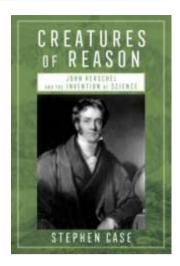
detail the contributions of these two late 19th and early 20th century astronomers.

Living at a time when controversies about Mars peaked, when great observatories were being built, and when research increasingly turned away from the Solar System toward the stellar and extra-galactic universe, these observers made spectacular contributions to astronomy. Their work still inspires, and continues in Perseverance rover's explorations of the surface of Mars, carrying forward Lowell's dream of showing that Mars may once have been "the abode of life", and in Barnard's pioneering wide-angle photographs of the Milky Way, which first showed the sweep, majesty and complexity of the Galaxy.

The work of decades of research and writing, Sheehan has produced what is likely to become the definitive work on these two great astronomers.

Creatures of Reason: John Herschel and the Invention of Science, by Stephen Case (University of Pittsburgh Press), Nov 2024, pp.320 (hardback, £48.99), ISBN 9780822948384

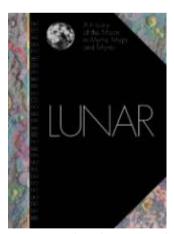
In his lifetime, John Herschel was Britain's best-known natural philosopher, a world celebrity, and arguably the first modern scientist of the generation in which the term itself was invented. The polymath son of William Herschel, discoverer of Uranus and constructor of the world's largest telescopes, Herschel took highest honors as a student at Cambridge, conducted groundbreaking work in chemistry and optics, helped establish a mathematical revolution, extended his father's astronomical surveys to the entire sky, and wrote the popular texts by which a generation



of readers learned what it meant to do science. Along the way, Herschel gave to natural philosophy the contours of modern science, defining scientific theories as "creatures of reason rather than of sense." His creatures of reason could also refer to a new type of scientific practitioner: the natural philosopher beginning to transition into the

modern scientist. With this book, Stephen Case encompasses Herschel's impact on mathematics, chemistry, geology, and optics as well as the organization of science and its relation to government, society, and culture, revealing Herschel's transformation of the practice of science itself. Drawing on his unpublished manuscripts, correspondence, and notebooks from archives in London, Cambridge, and Austin, this book contributes significantly to our understanding of the early life and career of the nineteenth century's most influential natural philosopher.

Lunar: A History of the Moon in Myths, Maps, and Matter by Matthew Shindell (ed.) (Chicago University Press), Nov 2024, pp.256 (hardback, £50.00), ISBN 9780226836515



The first book to combine exquisite cartographical charts of the Moon with a thorough exploration of the Moon's role in popular culture, science, and myth.

President John F. Kennedy's rousing "We will go to the Moon" speech in 1961 before the US Congress catalyzed the celebrated Apollo pro-

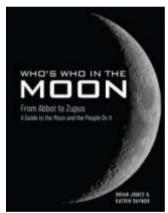
gram, spurring the US Geological Survey's scientists to map the Moon. Over the next eleven years a team of twenty-two, including a dozen illustrator-cartographers, created forty-four charts that forever changed the path of space exploration.

For the first time, each of those beautifully hand-drawn, colourful charts is presented together in one stunning book. In *Lunar*, National Air and Space Museum curator Matthew Shindell's expert commentary accompanies each chart, along with the key geological characteristics and interpretations that were set out in

the original Geologic Atlas of the Moon. Interwoven throughout the book are contributions from scholars devoted to studying the multifaceted significance of the Moon to humankind around the world. Travelling from the Stone Age to the present day, they explore a wide range of topics: the prehistoric lunar calendar; the role of the Moon in creation myths of Ancient Egypt, Greece, and Rome; the role of the Moon in astrology; the importance of the Moon in establishing an Earthcentred solar system; the association of the Moon with madness and the menstrual cycle; how the Moon governs the tides; and the use of the Moon in surrealist art.

Combining a thoughtful retelling of the Moon's cultural associations throughout history with the beautifully illustrated and scientifically accurate charting of its surface, *Lunar* is a stunning celebration of the Moon in all its guises.

Who's Who In The Moon: From Abbot to Zupus, A Guide To The Moon And The People On It, by Brian Jones and Katrin Raynor (White Owl), Dec 2024, pp.184 (hardback, £25.00), ISBN 9781526737076



This book is aimed not only at the beginner or near-beginner, but also at the backyard astronomer who is perhaps experienced in other areas of observation but who has decided to spend more time considering the Moon as an alternative target. The book provides a visual introduction to

our closest celestial neighbour, opening with an introductory section which details not only the history of lunar mapping and naming of lunar formations, but also provides useful information on observing the lunar surface and what observers can realistically expect to see when they look at the Moon with the naked eye, binoculars or a small/medium telescope.

The introductory section is followed by a lengthy series of images, including not only wide field panoramic views, but also a large number of more detailed images showing close-up views of different areas of the Moon and featuring individual craters, mountains, valleys and much more. Many of the individual features shown on these images are identified by name and are accompanied by biographical sketches relating to the men and women after whom they are named.

This is a non-technical, up-close-and-personal visual look at the Earth's only natural satellite and many of the individual features scattered across its surface. Rather than offering itself as a full and exhaustive

guide to the lunar surface, *A Guide to the Moon* is more of a *vade mecum* which enables and (hopefully) encourages the reader to become more acquainted with the lunar landscape on a personal level, with a view to learning more about the astronomers and other scientists whose names are immortalised by having lunar features named after them.

Who's Who in the Moon was inspired by, and is a tribute to, a Memoir published by the British Astronomical Association (BAA) in 1938 entitled Who's Who in the Moon written by Mary Evershed, the first Director of the BAA Historical Section. The biographical notes in A Guide to the Moon include examples of those penned by Mary Evershed in her original publication. The Introduction is by Mike Frost, Director of the BAA Historical Section.

RECENT BOOKS MISSED

The Risāla Dhāt al-kursī attributed to Ptolemy. A Treatise on the Celestial Globe with Stand, by Flora Vafea (Brepols), 2024, pp.245 (PDF, open access), ISBN 9782503602226, and

Ptolemy's Cosmology in Greek and Arabic. The Background and Legacy of the Planetary Hypotheses, by Paul Hullmeine (Brepols), 2024, pp.479 (PDF, open access), ISBN 9782503607177





Both of these books are **free to download** and are produced by the *Project Ptolemaeus Arabus et Latinus* (PAL), which is dedicated to the edition and study of the Arabic and Latin versions of Ptolemy's astronomical and astrological texts and related material. These include works by Ptolemy or attributed to him, commentaries thereupon, and other works that are of immediate relevance to understanding Ptolemy's heritage in the Middle Ages and the early modern period up to 1700 A.D.

Note: The descriptions of the books above are largely taken from the publishers. They are not reviews and do not imply endorsement by the SHA.

SUZANNE DÉBARBAT

It is with great sadness that we record the death of the eminent French historian of astronomy, Suzanne Débarbat, on 5-6 Aug 2024 at the age of 95.

Suzanne was first employed at the Paris Observatory in 1955 as an assistant astronomer and spent her whole career there. At first she was engaged in astrometry and later became Director of the Department of Fundamental Astronomy at the Observatory (1987-92). She gained international renown in the history of astronomy and became the President of Commission 41 (History of Astronomy) of the IAU (1991-94).

She was always generous with her time and advice and those members of the SHA who took part in our joint conference with the Société Astronomique de France (SAF) at the Paris Observatory in 2017 will remember her giving us a guided tour around the Observatory and her enthusiastic agility as she raced up stair cases and across the roof, despite her already advanced years.



Suzanne Débarbat shows SHA visitors an exhibition of documents at the Paris Observatory
(photo: D.Sellers)

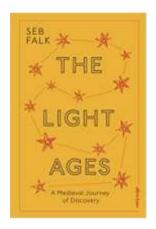
LASSELL TELESCOPES GIVEN TO LIVERPOOL MUSEUM

Descendants of the astronomer, William Lassell (1799-1880), have recently donated two of his telescopes to the World Museum in Liverpool. These are now being prepared for exhibition in the Museum's 'Space Gallery'.

2025 OSTERBROCK BOOK PRIZE

The prize committee of the Historical Astronomy Division (HAD) of the American Astronomical Society has announced that the winner of the <u>Donald E. Osterbrock Book Award for 2025</u> will be **Seb Falk** for his book *The Light Ages: The Surprising Story of Medieval Science* (2020).

SHA members will recall that Dr Falk gave a lecture on the subject of this much-praised book via a webinar on 18 Dec 2020, entitled *Monks, astrolabes and equatoria: practical astronomy in the later Middle Ages*.



SHA SUBSCRIPTION RATES

Amazingly, membership subscriptions for the SHA have only increased by £1 since its inception in 2002.

Now, however, faced with rising costs (especially postage and printing costs), the SHA AGM 2024 has approved the following changes to re-appraised subscription rates:

Concessions will continue, but will only apply to: Under 18 or in full-time education Low-income persons in receipt of state benefits (other than state pension)

The subscription rates, from 2025, shall be:

Standard: £25 Concession: £20 Household: £30 Institutional: £25

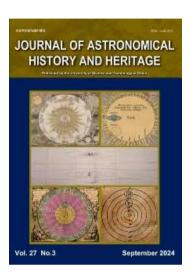
In addition the annual overseas postage supplement will be £15 for Europe and £30 for the rest of the World

The Council feels sure that members will be convinced that these rates are reasonable and represent excellent value for money.

WEB-LINKS NOTICED

Journal of Astronomical History and Heritage

The latest issue of the <u>Journal of Astronomical History</u> and <u>Heritage (Volume 27, Issue 3, Jun 2024)</u> (282 pages) is now available for free download.



Major Lunar Standstill Moonrise, 'live' from Stonehenge

This English Heritage video, livestreamed on 21 Jun 2024 from Stonehenge, at moonrise during the recent major lunar standstill, includes a detailed technical commentary on the event and its significance from Heather Sebire, Clive Ruggles, Amanda Chadburn, Fabio Silva and other experts.

Five decades of missing matter

Two papers that appeared in 1974 changed the face of the universe. Independently authored by separate collaborations, one in the US and the other in Estonia, they argued that galaxies are 10 times as massive and extensive than had previously been thought. In this free paper, published in Physics Today (77 (8), 34–43 (Aug 2024)), Jaco de Swart tells their story. Both groups combined various astronomical observations to show that most of the universe's mass is hidden in invisible clouds around galaxies. The universe itself, too, they illustrated, is heavier by a factor of 10 than had previously been believed, potentially changing human understanding of the fate of the cosmos. Their arguments marked "a watershed in our understanding of galactic structure, galaxy formation, and cosmology," read a review in the 1999 centennial issue of the Astrophysical Journal. Five decades ago those papers proposed the existence of what we now know as dark matter.

Astronomical Observatory Unearthed in Ancient Egypt

Archaeologists from the Egyptian Ministry of Tourism and Antiquities have unearthed the ruins of a building which constituted the largest astronomical observatory known in Egypt in the 6th century BCE, part of what is now known as the Temple of the Pharaohs in the town of Buto.

There, early astronomers assiduously tracked the movements of the Sun and the stars, a vital service in the lives of the ancient Egyptians.

The Egyptians were among the most adept astronomers in ancient history, and their legacy echoes to this day. It was in ancient Egypt that the 365-day calendar was born, and the 24-hour day. They completely mapped the night sky, and had their own constellations and zodiac, some signs of which are still recognized today.

The Herschels: A Most Astronomical Family and the Transformation of Astronomy

In the late eighteenth and early nineteenth centuries, professional astronomers who worked at official observatories focused on the motions of astronomical bodies. The stars were generally only of interest as a background grid that helped astronomers track the motions of solar system objects.

The astronomy pursued by William and Caroline Herschel was utterly different. In this talk to Northern Virginia Astronomy Club, <u>Prof. Robert Smith explores</u> the radically new astronomy of the Herschels.

OTHER MEETINGS, COURSES & EXHIBITIONS NOTICED (non-SHA)

BAA Historical Section Meeting

Sat 31 May 2025 - 10.00-17.00

<u>This conference</u> will be held at the Devon and Exeter Institution, 7 Cathedral Close, Exeter EX1 1EZ. Further details to follow.

INSAP 2025: 13th International Conference

9-13 Jun 2025. <u>This conference</u> will be held at Queen's University Belfast, Belfast, Northern Ireland.

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SHA CALENDAR 2024/5

MONTH	SHA EVENT OR PUBLICATION	VENUE
2024		
JAN	SHA Online Lecture No.15, by Frank Manasek (24 Jan)	Via 'Zoom'
FEB	SHA e-News (1-5 Feb)	
MAR	SHA Online Lecture No.16, by Ruth Boreham (13 Mar)	Via 'Zoom'
APR	SHA Spring Conference (20 Apr)	Birmingham
MAY	SHA e-News (1-5 May)	
	SHA Bulletin 41 (May)	
	SHA Online Lecture No.17, by Virginia Trimble (8 May)	Via 'Zoom'
JUN	The Antiquarian Astronomer 18	
JUL	SHA Summer Picnic (21 Jun)	Rugby School Ob- servatory (TBC)
AUG	SHA e-News (1-5 Aug)	
SEP		
OCT	SHA Online Lecture No.18, by Karen Masters (16 Oct)	
	SHA AGM & Autumn Conference (26 Oct)	Birmingham
NOV	SHA e-News (1-5 Nov)	
DEC	SHA Bulletin 42 (mid-Dec)	
2025		
JAN	SHA Online Lecture No.19, by Anna Marie Roos (22 Jan)	via 'Zoom'