SHA e-News

Society for the History of Astronomy

Volume 17, no.4, November 2025 **Editor: David Sellers**

£9.7m AWARD TO ROYAL OBSERVATORY GREENWICH

Royal Observatory Greenwich

On 8 Oct 2025 the *Heritage Fund* announced that it was celebrating *World Space Week* (4 Oct –10 Oct 2025) with a £9.7m grant towards the Royal Observatory's £77m *First Light* project. It stated that the funding would "help protect the heritage of one of the world's most important historic scientific institutions and encourage a new generation of scientists".

The aim is to "conserve the Observatory's highly significant listed buildings, which were founded by Charles II in 1675. Landscaped paths will link the north and south parts of the site, and a new access tower will be added to the Great Equatorial Telescope. Once the work is complete, visitors will enter through a contemporary new pavilion."

A new courtyard, *Astronomers Court*, will provide a covered space for more live science events, including experiments, astronomer-led talks and object handling. Above the new courtyard, a roof terrace will be used for live streaming of celestial spectacles through the Observatory's modern telescopes.

The **SHA**, along with the **RAS Heritage Committee**, has previously expressed concern about the potential impact of the new pavilion on Flamsteed's original Quadrant House (see *SHA e-News*, Nov 2024).

HERSTMONCEUX CASTLE restoration almost complete

OBSERVATORY SCIENCE CENTRE future 'secured'

Bader College and Herstmonceux Castle Estate have announced (Sep 2025) that the necessary conservation and restoration work on the south wing of the castle, former home of the Royal Greenwich Observatory, is progressing on schedule and remains on track for completion by mid-October 2025.

The scaffolding has been removed from the gatehouse, revealing the beautifully rebuilt parapet walls surrounding the upper parts of the south wing gatehouse.

In a separate development, Bader College and Science Projects have reached a 10-year agreement to keep the Observatory Science Centre at Herstmonceux Castle Estate in East Sussex.

The official statement declares that:

> *"This secures the future of one of the UK's most iconic destinations for interactive science, ensuring generations of families can continue exploring hands-on discovery at this historic site.*
>
> *"This renewed partnership marks a commitment to joint working, enhancing the visitor experience and investing in key improvements across the Herstmonceux Castle Estate. Together Bader College and Science Projects aim to unlock The Observatory Science Centre's full potential to inspire future generations through science, history, and discovery.*
>
> *"This agreement reflects our joint ambition to preserve and enhance this unique site. The Observatory Science Centre is an important part of the Herstmonceux Castle Estate, and we look forward to working closely with Science Projects to deliver an exceptional experience for visitors."*

FUTURE SHA MEETINGS

2025 AGM & AUTUMN CONFERENCE

This will be on **Sat 8 Nov 2025** at **10 am–4.30 pm** at the Birmingham & Midland Institute, 9 Margaret St, Birmingham, B3 3BS

Speakers:

Sian Prosser – *Charting the heavens in type: the oldest astronomical printed books in the Royal Astronomical Society Library*

Jacqueline Mitton– *The extraordinary astronomical life of Mary Williamson*

Mike Leggett – *Astronomy and Exploration*

Louise Devoy– *Observatory Objects (commemorating 350 years of the Greenwich Observatory)*

2026 SPRING CONFERENCE

This will be on **Fri 24 Apr 2026** at **10 am–4.30 pm** at the Birmingham & Midland Institute, 9 Margaret St, Birmingham, B3 3BS. Various circumstances have obliged us to have the event on a weekday. We apologise for any inconvenience this may cause.

2026 SUMMER PICNIC

The SHA Summer Picnic 2026 will be more ambitious than previous ones. It will be from **Fri 12 – Mon 15 Jun 2026** and will be centred in Dublin with day trips to: Birr Castle, the home of Lord Rosse's great reflecting telescope—the '**Leviathan of Parsonstown**'; Newgrange World Heritage Site; and possibly, Dunsink Observatory. Planning is still under way, so these details are provisional. Watch out for further information.

ONLINE MEETINGS

Free online evening presentations for members:

Wed 26 Nov 2025

Title: **Henry Enfield Roscoe, the spectroscopist** (and friend of Joseph Baxendell)

Speaker: **Peter Morris**

Wed 14 Jan 2026

Title: **Marie Curie and her astronomical connections**

Speaker: **Dava Sobel**

Tue 17 Mar 2026

Title: **Sightlines and site lines: astronomical research in south-east Utah**

Speaker: **James Krehbiel**

Links will be sent to members near to the dates.

RESEARCH WORKSHOP?

During the recent webinar on research techniques, there seemed to be interest in organising a one-day workshop on methods of conducting research in the history of astronomy. It would be useful to know what demand there would be for such an event. If you are interested, please contact the Editor.

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
Asst. Treasurer Bill Barton
Membership Secretary Graham Jones
SHA Bulletin Editor 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

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 21 Jan 2026, 6 p.m. (via 'Zoom')

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

SHA PUBLICATIONS

SHA e-News

The next issue of the *e-News* is due in early-Feb 2026. 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 43 of the *Bulletin* (Spring 2025) was distributed to SHA members in early May 2025. **Issue 44** (Winter 2025, pictured below) is due out soon.

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 *Bulletin* web page.

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

THE ANTIQUARIAN ASTRONOMER

Issue 19 of *The Antiquarian Astronomer* was sent out to all members in mid-June 2025.

The subjects include: *Annie Walker*, by Roger Hutchins & Mark Hurn; *Eugène-Michel Antoniadi*, by Richard McKim and Bill Sheehan; *Shirburn Castle Observatory*, by Timothy Baker; *Elizabeth Mary Williamson*, by Jacqueline Mitton; *Eclipse expeditions at the NLO*, by Beatrice Steele; and the *Solar eclipse of 1925 in Connecticut*, by Horace Smith & Roy Kilgard.

Issue 20 should be published in June/July 2026. Members and others wishing to submit material for future issues of *The Antiquarian Astronomer* should contact the Editor (Peter Morris) at *aaeditor@shastro.org.uk*. A new Style Guide (Sep 2025) for authors and some back issues can be found on *The Antiquarian Astronomer* web page.

Please note that, from issue 19, Ian Ridpath and Peter Morris have swapped roles as Editor and Deputy Editor respectively.

SAFEGUARDING POLICY

The SHA now has in place a policy on '**Safeguarding**'.

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 to provide members, other stakeholders and the public with the overarching principles that guide our approach in doing so.

Please let Carolyn Kennett or James Dawson (our nominated *safeguarding officers*) know, if you have any concerns regarding this issue.

SHA LIBRARY NEWS

The SHA library now has about 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 work of lesser known British astronomers and authors.

We continue to look for and obtain new items (newly printed or second-hand books) for the Library and a list of the latest acquisitions is given below. I have started working my way through some boxes of items which have been sitting unsorted for several years and cataloguing these. Many are just pamphlets and booklets, but still interesting and important for the history of astronomy. More information about these is in the full catalogue.

Author Title Year

Miles *The comet is coming! Halley's Comet and how to find it… commemorative issue* 1985

Mills, *Thomas Harriot: a brief report*, 2009

Nath, *A handbook of Maharajah Jaisingh's astronomical observatory, Deli*, nd

National Maritime Museum, *The old Royal Observatory: a brief guide*, 1967

Pritchard, *Charles Pritchard, late Savilian professor of astronomy in the University of Oxford: memoirs of his life*, 1897

Sheehan & Cunningham, *The Solar System*, 2025

Shindell, *Lunar: a history of the moon in myths, maps + matter: incorporating the USGS/NASA Geologic Atlas, 1962-74*, 2024

Singh Rajawat, *Astronomical Observatory of Jaipur*, 1981

Smith, *Stars over the red cedar: research, education, and outreach at the Michigan State University Campus Observatories*, 2019

SHA, *Library Manual and Catalogue*, 2009

Spencer Jones, *John Couch Adams and the discovery of Neptune*, 1947

BMI (Birmingham): home of the SHA Library

Toulmin, *Man and the Heavens (talks for sixth forms, BBC broadcasts to schools spring term 1959)*, 1959

Whitaker, *The University of Arizona's Lunar and Planetary Laboratory: its founding and early years*, 1986

Below are the recent donations to the SHA Library:

Author Title Year Donor

Longdon, *Encounter '86: an international rendezvous with Halley's comet*, 1986, Carpenter, Eddie

Kanas, *Star maps. History, artistry, and cartography*, 2019, Dunlop, Storm

Bell, *The Interstellar Age: The Story of the NASA Men and Women Who Flew the Forty-Year Voyager Mission*, 2016, Hutchins, Roger

Hutchins, *Yorkshiremen with clout: the Leeds Astronomical Society of 1859, and the pursuit of astronomy at Leeds University after 1904*, 1997, Hutchins, Roger

Prechtl, *Practical Dioptrics: a complete and general guide to the manufacture of achromatic telescopes*, 2025, Schmidt, Rich

Wright, *Dark Skies: Bright Stars. John Couch Adams and the discovery of Neptune*, n.d., Hutchins, Roger

A catalogue of books in the library is available and a link to this can be found on the library page of the SHA's website (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 you'd like help with your research or finding a book or article, or other library-related matter, please do contact James and Carolyn who would love to hear from you.

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

LOCAL ASTRONOMICAL SOCIETY HISTORY APPEAL

Has your local astronomical society published a booklet, pamphlet or leaflet giving an account of its own history? If so, the SHA would be keen to obtain a copy. Please contact our booklet distributor, Gerard Gilligan, with details.

RAS HERITAGE COMMITTEE

SHA Council member Bill Barton has been selected as **the SHA representative** on the Astronomical Heritage Committee of the Royal Astronomical Society.

Bill replaces David Sellers, who previously represented the SHA for two 3-year terms (the maximum allowed by the rules).

The Committee is the RAS's strategic body for consideration of all matters relating to heritage assets in astronomy and geophysics. It provides recommendations and advice to RAS Council on the required actions and expenditure to ensure that such assets are studied, protected and maintained, both for their greater enjoyment and to the potential benefit of future historical research. The Committee is chaired by the well-known historian of astronomy, Dr Rebekkah Higgitt.

Some of the recent key concerns of the Committee have been the development proposals at the Royal Observatory, Greenwich, and the impact of new highway proposals near the UNESCO World Heritage site at Stonehenge.

SHA SURVEY NEWS

The summer quarter has seen a steady stream of additions to the survey from our usual contributors, namely Bill Barton, Phil Barnard, and Gerard Gilligan.

During this quarter, Phil has identified a string of new names for the survey from the Macpherson's Directory (typescript document). These have mostly been more recent Scottish astronomers that fell outside the scope of David Gavine's research into Scottish Astronomy (1745-1900). Notable figures include William M. H. Greaves (1897-1955), who worked at both of the Royal Observatories in Greenwich and Edinburgh, becoming Astronomer Royal for Scotland (1938-55). In addition to professional astronomers, this source also identified significant Scottish amateurs for the Survey. These include William Reid (1861-1928) who was born in Aberdeen, an amateur who emigrated to South Africa in 1902. A member of the BAA, Reid discovered six comets and obtained visual evidence of the transparency of Saturn's rings (1920).

Bill Barton has provided a steady stream of new names for the Survey: forgotten amateur astronomers who need to be documented. These included Margaret Ferguson Herkless [nee Knox] (1851-1911), a founder member of the BAA who contributed papers on the aurora to the Society. An intriguing figure who needs further research, overshadowed by her more famous husband, a professor at Glasgow University, in later life she appears to have had mental health issues. Other figures uncovered include Thomas Royds (1884-1955), who graduated from Manchester University, later working on spectroscopy under Prof. Arthur Shuster. Royds was then appointed Director of Kodaikanal Observatory (1923), India, where he worked until 1939. He then took up a new post in Istanbul (1942), before finally retiring to Southport in 1947.

Gerard Gillian supplied details of William H. Watts (1874-1952), a physics/chemistry teacher at the Birkenhead Institute – the school attended by the war poet Wilfred Owen. A keen amateur astronomer, he organised visits to the nearby Bidston Observatory. An active member of the BAA, fellow of the RAS, he served as president of the Liverpool AS (1925-8). Details about Watts were gleaned from local archive sources such newspapers and school magazines.

My own researches have added new observatories. These include the Moffat Community Observatory [MCOD] (2021-) in Dumfries that is run by the Moffat Astronomy Club. A similar institution added, is the Eric Tomney Memorial Observatory [ETMO] (2023-), established by the Astronomical Society of Glasgow. Other figures that I have added include John P. G. Smith (1818-1909), whose existence was alerted to me by Phil Barnard, when he came across a reference to an astronomer at Ironbridge on the website of the Ironbridge Gorge Museum. A Liverpool merchant, Smith later moved to Ironbridge, after investing in a local tile works. Living at Swyney Cliff House, Coalport, he established an observatory in the grounds of his home (1888).

Overall traffic (views/visitors) on the Survey site are down for the reporting period, probably due to holiday period of the summer months. The overall trend, year on year, since 2020 is upwards and exceeds previous figures with over three months still remaining this year. Most hits for the site are through search engines; Visitors are predominantly from the UK, followed by English speaking counties, with the exception of Germany and India.

Kevin Johnson - Survey Coordinator, September 2025

SHA RESEARCH GRANTS

SHA *Small Research Grants* are available for the period **1 Nov 2025 to 31 Oct 2026** 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 application form and regulations 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*:

Mr Barrry FitzGerald	**Dorset**
Mr Andy Sawers	**Glasgow**

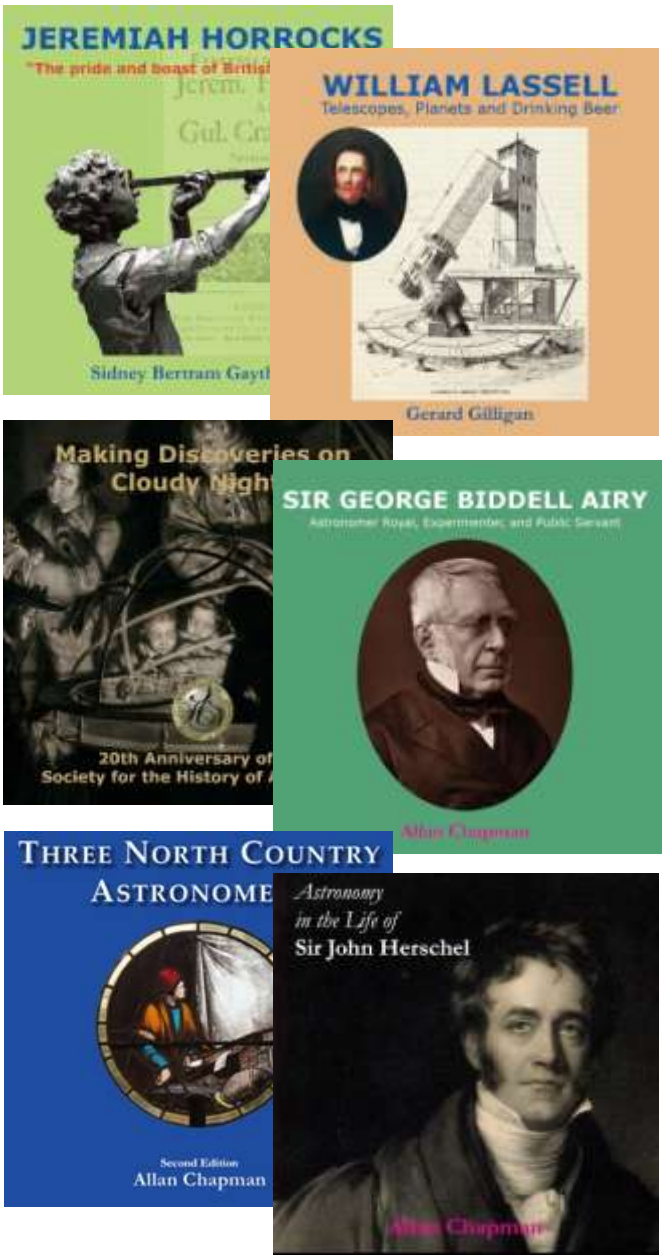
SHA REVISED CONSTITUTION

The seventh version of the SHA Constitution (adopted at the 2024 AGM) is now available on our website.

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.

SHA BOOKLET SERIES



Six 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; a revised edition of ***Three North Country Astronomers*** (2024, £8), by Allan Chapman; and ***Astronomy in the Life of Sir John Herschel***, by Allan Chapman (2025, £10). The prices relate to purchase at SHA events. For mail order costs, please contact *bookshop@shastro.org.uk*.

The next title, currently in preparation, is ***A History of Archaeo-astronomy***, by Carolyn Kennett. If you wish to suggest topics and/or authors for the future, please let the Editor know (David Sellers).

A WORD FROM THE CHAIR

As the winter months approach, many are looking forward to the upcoming AGM in Birmingham on 8th November, as well as the return of our online webinars. The first session, "Research Techniques," led by Carolyn Bedwell, Bill Barton, and Mike Leggett, offered valuable insights and is now available on our YouTube channel for those who could not attend live.

Recently, the astronomical community has heard about the discovery of several new comets, with one in particular set to capture public attention: C/2025 A6 (Lemmon). This comet, discovered by the Mount Lemmon Survey in Arizona on 3 January 2025, is classified as non-periodic, Lemmon's orbit brings it close to the Sun only once every 1,350 years, making this a truly rare event.

On 8 November 2025 (the date of our AGM), the comet will reach its closest point to the Sun, known as perihelion, at a distance of just 0.53 astronomical units, or about 79 million kilometres. As comets approach the Sun, the increase in temperature causes their icy components to vaporize, resulting in the spectacular tails that are often visible from Earth.

I started reflecting on Lemmon's previous visit, which occurred around the year 675 AD. The world at that time was vastly different: Europe was in the midst of the Early Middle Ages, the Byzantine Empire was flourishing under Constantine IV, and the Tang Dynasty was a centre of cultural and technological innovation in China. The Islamic Caliphate was advancing new ideas, and the Maya civilization was constructing remarkable cities in Central America. It is intriguing to imagine that people living in 675 AD may have witnessed Lemmon's passage, perhaps interpreting it as an omen or a sign from the heavens, as was common in many cultures.

The first comet recorded in the Anglo Saxon Chronicles was in 678 AD, *"HER ATEOWEDE COMETA AND SCAN III MON AS AELCE MORGEN SWILCE SUNNE BEAM."* "In this year appeared the star called comet, in August, and shone for three months each morning like a sunbeam."

Could this have been comet Lemmon? Whatever this comet was it had a lasting effect on Saint Wilfrid of York, a powerful Northumbrian bishop in the seventh century, who ruled a large number of monasteries. In year 678, when the comet appeared, it was seen as a bad omen and Bishop Wilfrid was driven from his bishopric after quarrelling with King Ecgfrith of Northumbria.

Determining whether C/2025 A6 (Lemmon) was a prominent feature in the night sky during its last visit is challenging. Comets with orbital periods over 1000 years can have extreme semi-major axes and eccentricity and can fluctuate significantly in their orbital paths. Also the brightness of a comet depends on several factors, including its size, composition, and the amount of ice and dust it contains. Unfortunately, historical records from the 7th century are limited, so we cannot say with certainty how striking an appearance it may have had. However, given its close approach to the Sun, it is plausible that Lemmon was a noticeable and memorable sight.

Happy comet hunting all.

Carolyn (SHA Chair)

SHA SUBSCRIPTION RATES

Faced with rising costs (especially postage and printing costs), the SHA Oct 2024 AGM approved the following subscription rates:

The annual subscription rates, from 2025, are:

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.

Concessions only apply to:
Under 18s or those in full-time education;
Low-income persons in receipt of state benefits (other than state pension).

STANDING ORDERS & NEW SUBS!

A handful of members, perhaps not on email, or forgetting to let us know that their email addresses have changed, still have not updated their standing orders to allow for our new subscription rates (£25 ordinary). Please check that your standing order instructions comply with the new rates.

'PRACTICAL DIOPTRICS': 19th century optical instruction

Translating Precht's 1828 Guide

An interview with SHA member Richard E. Schmidt

Rich Schmidt

Q1. What was your day job at the US Naval Observatory in Washington before retirement? What is your role there now (if any)?

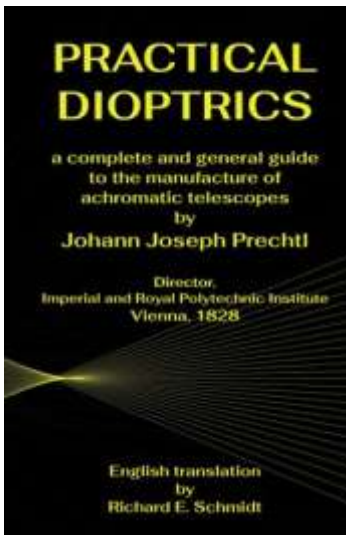
I began work in the Nautical Almanac Office, US Naval Observatory, in 1975 computing tables for the *American Ephemeris and Nautical Almanac* (later named *The Astronomical Almanac*). I was honored to be hired right out of undergraduate school, for as a teen with a 3-inch Tasco equatorial refractor I revered the USNO's Almanac. (I still have a 1970 letter from my Congressman who kindly forwarded a copy to me.) In 1989 I moved to USNO's Time Service Department, attracted by its more advanced computing – and much larger budget! In 1994 I introduced USNO's NTP network time synchronization service, and the following year built the US Navy's first public web server. Though I "retired" in 2012, I am still contracting full time on the modernization of USNO's NTP service.

Q2. You have written on historical topics for many years – including about the USNO and other observatories, their instruments and staff (e.g. Harvard and Liverpool). What drew you to the history of astronomy? Does a particular period or theme interest you most?

The USNO is a wonderful mix of high technology and astronomical history, and one cannot fail to absorb a great respect for the astronomers of its past and a love of their instruments. In 1979 I was allotted the princely sum of $1800 to rescue the 1892 12-inch Saegmuller-Clark refractor from the dump, restoring it to its original dome atop the main building, because as was said at the time "at the USNO it was mostly all work and no play…" and we needed a telescope for casual use by the staff. It has ever since been in constant use for evening tours and even Smithsonian classes. What continues to fascinate me is the absolutely remarkable talent of 19th century astronomers like young Horace P. Tuttle at Harvard and Asaph Hall and Simon Newcomb at USNO. Not one in a thousand astronomers of today could compute on paper as they did every day, often alternating with 9 hours of telescope work in frigid Boston winters!

Q3. Your translation of Johann Prechtl's 1828 'Practical Dioptrics' from the German has now been published. Prechtl is not so well-known these days in the astronomical community. What made you want to translate his work? How long did it take?

I can thank Covid for this. While confined at home in the fall of 2023, I decided to take apart and lacquer an old brass Plössl dialyte that had been standing in the corner of my living room for over 40 years. *Just who was Plössl?* I wondered, and so I determined to find out all that I could about this incredibly talented Vienna artist (as such opticians were called). Now I am at work on the first English language technical biography



of Simon Plössl. Johann Prechtl was not only one of Plössl's tutors, he was in fact the founding director of the great Imperial and Royal Polytechnic Institute in Vienna, whose purpose was to promote Austrian industry by providing applied physics instruction to artists and craftsmen. I found an original copy of Precht's *Dioptrics* on Abe Books and took on its translation in order to get a sense of what Plössl would have been taught. It took about six weeks to produce this translation.

Q.4 Did anything surprise you as you tackled this project?

What surprised me most in Prechtl's book was his skill as an instructor in making optical theory accessible to anyone interested in telescope design. I found quite a number of gems like how to determine refractive indexes of lenses, how to compute lens curves, techniques for centering optics, where to place eyepiece diaphragms, all sorts of handy tips that still apply after 200 years—and helpful in my own study of my Plössl optics.

Q.5 This was a sub-project within a greater plan to write a technical biography of Simon Plössl. Most modern amateur astronomers will be familiar with his eyepiece design, whilst knowing nothing about its inventor. Why do you think we should know more? What is your timescale?

What little is widely "known" about the Plössl eyepiece is generally untrue: it wasn't invented by him, and certainly not as late 1860, rather in 1828 he introduced its design as a kind of achromatized Ramsden ocular in his microscopes, (a very great advance for microbiology, and his path toward becoming a millionaire); Plössl did not provide that eyepiece with his telescopes! The life and works of this man, whom Encke called "the worthy successor to Fraunhofer", is a classic tale of a self-made entrepreneur who greatly advanced the state of optical science and whose products were to be found in nearly every European laboratory and observatory. I plan to have his book out by the fall of 2026.

Q.6 Do you collect Plössl optical instruments?

I certainly do now! I have Plössl refractors, both dialytes and Fraunhofer types, from the US, Austria, Hungary, France and Australia, spyglasses and so-

called "feldstechers", a dipleidoscope and one microscope. My first dialyte was used by the US Naval Academy and the US Naval Observatory for the solar eclipses in Labrador, 1860, Missouri, 1869, and Italy,1870, the latter by Asaph Hall.

Q.7 Where did you acquire your skill in German?

I'm unskilled in German, but learned enough by translating over 600 German sources about Plössl, using DeepL and Google Translate. These have gotten very good, with the occasional bad guesses, like "buttocks" for "seat".

Q.8 Are you an active amateur astronomer now?

Most recently I have observed and published in the JAAVSO photometric periods of galactic nova with the 32-cm PlaneWave astrograph on my roof in Washington, DC. I've recently added a 180mm Maksutov for planetary viewing.

Q.9 Do you have an extensive astronomical library? If you had to save just one volume, what would it be?

I now have a very compact library, having been downsizing in the past year. At the moment, it would have to be a bound copy of the *Yearbook of the Imperial and Royal Polytechnic Institute in Vienna*, 1829, in which Simon Stampfer calculates the optical properties of Alexander Roger's proposed design for the dialyte, with nice illustrations. Here Stampfer concludes that the dialyte will offer "quite insignificant" advantages and yet its lenses must be formed

"with such extreme accuracy during grinding that one can probably never expect to achieve it directly"—an achievement Simon Plössl announced to the world three years later!

Q.10 How did you come across the SHA?

By way of my long-time friendship with Roger Hutchins, the brilliant Oxford historian, who encouraged and edited my past article on the Tuttles of Harvard College Observatory.

Q.11 Do you think we could improve what we offer to members? In particular, what would appeal to overseas members, such as yourself ?

To me it seems that the *Bulletin* is laid out with rather large type and much empty space. It would seem to fit a smaller format. But the varied content is its strong point and the image quality is tops.

I think that it would be very interesting to do articles where an experienced observer spends a few nights observing with some of the most historic instruments in English observatories, giving a kind of review of the experience with lunar and planetary, double star, or other visual objects. I'd want to hear the details as if I were there with him: how to open the dome, set the telescope on an object, select an eyepiece, how is the tracking, seeing and image quality, etc.

I also think it would be interesting to have someone demonstrate the tedium and skill of past observatory work. For example, use three 19th century observations of a comet and go through computing its orbit—using logarithms and no calculators—just as was done in the past. Perhaps not completely interesting reading, but certainly impressive. I once saw it detailed in an old *Encyclopedia Britannica*.

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 stalls at the Webb Deep-Sky Society annual meeting at Cambridge in June, and at the Liverpool MakeFest in July.

Forthcoming events

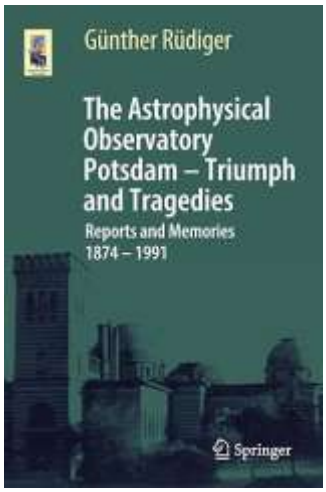
We will be at the International Astronomy Show on **Sat 1 Nov 2025**. This year it will be at the Sports Connexion Leisure Club & Venue, which is based in Ryton-on-Dunsmore, Warwickshire.

Future events

Attendance at astronomical shows and meetings, both large and small, provides a double benefit for us. In addition to generally waving the SHA flag and reminding people of our existence and our activities, our attendance also provides us with good opportunities for membership recruitment and sales of books and booklets. However, the cost of a stall at several big shows has more than doubled in the last year! It is becoming increasingly obvious that some shows are (or soon will be) beyond our budget.

FORTHCOMING BOOKS NOTICED

The Astrophysical Observatory Potsdam - Triumph and Tragedies: Reports and Memories 1874 - 1991, by Günther Rüdiger (Springer), Nov 2025, pp.348 (paperback, £34.99), ISBN 9783032062932

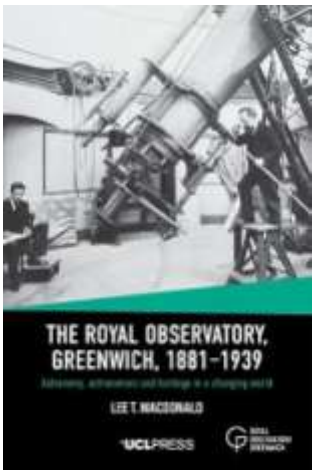


This book describes the 110 years of the Astrophysical Observatory in Potsdam (AOP) as the cradle of European astrophysics up to its disappearance in the 1980s. The first part consists of reviews on the work of the leading astronomers before the Academy reform, while the following part also contains memories of the author until the end of the Akademie der Wissenschaften and the end of the entire GDR as well as the formation 1991/92 of the Astrophysical Institute Potsdam (AIP) on the grounds of the Sternwarte Babelsberg in the course of the German unification.

The history of astrophysics on Potsdam's Telegraphenberg includes triumph and tragedies. It began with Hermann Vogel's discovery of the spectroscopic binary stars, Spörer's discovery of the Maunder Minimum of solar activity and Hartmann's clever argumentation on the existence of interstellar gas. Schwarzschild wrote from the war front to Einstein that gravitational waves should exist and Grotrian revealed the secret of the red corona line; later the dynamo theory of the origin of cosmic magnetic fields will migrate worldwide from here.

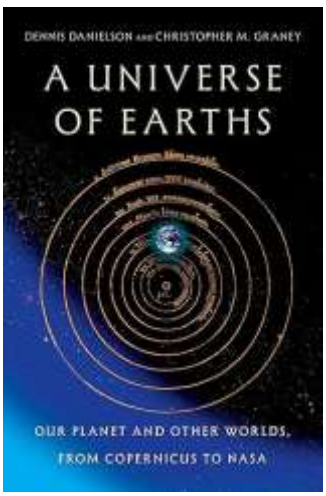
But the Great Refractor turned out to be too large, the hastily erected Einstein Tower also failed to achieve the desired success, Ludendorff drove its multi-talented master mind Freundlich away, and the tower was even planned to be completely removed. Walter Grotrian was not able to start work with his new coronograph, and all the candidates for his succession later declined. The reorganization of the Akademie der Wissenschaften zu Berlin into a socialistic state combine led to isolation and the suppression of the innovation pressure; dubious figures began to torpedo the research through invisible channels.

The Royal Observatory, Greenwich, 1881–1939: Astronomy, astronomers and heritage in a changing world, by Lee T. Macdonald (UCL Press), Mar 2026, pp.??? (paperback, £40.00), ISBN 9781806550449



Between the late nineteenth century and the outbreak of the Second World War, astronomy underwent a radical change, from a science centred on the positional measurement of stars to the study of astrophysics and the universe. This book tells the story of the Royal Observatory at Greenwich from 1881 to 1939, charting a hitherto under-researched period of its history and bringing its management to life. Using a wealth of primary-source research in the Royal Observatory's archives and elsewhere, Lee T. Macdonald describes and analyses in detail how the Observatory, originally founded in 1675 to tackle the problem of finding longitude at sea, branched out into areas at the cutting edge of astronomical research, including the photographic mapping of the sky and the study of solar eclipses. At the same time, he shows how the Observatory remained committed to its traditional missions in navigational and positional astronomy, and also how the Observatory's work became increasingly challenged by the growth of London, culminating in the decision to move the Observatory elsewhere. The story is a valuable exemplar of how a working observatory was gradually transformed into a heritage institution, which thrives to this day. The Royal Observatory, Greenwich, 1881–1939 will be essential reading for astronomers and historians of science, and important for heritage professionals, particularly those working in historic scientific institutions.

A Universe of Earths: Our Planet and Other Worlds, from Copernicus to NASA, by Dennis Danielson and Christopher M. Graney (OUP), Jan 2026, pp.208 (hardback, £22.99), ISBN 9780197803516

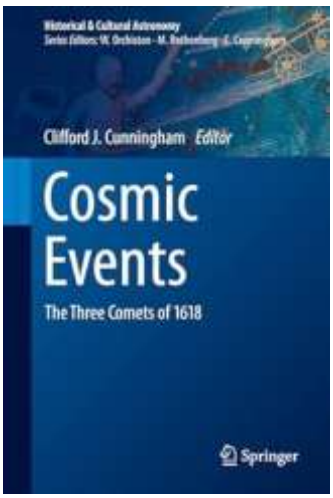


Planet Earth has been a familiar concept for a mere fraction of recorded history. Until about the mid-1600s, most humans thought of Earth as immobile, likely either dim or simply invisible from the Moon or anywhere else in the heavens, and not (like the planets) participating in what Galileo called "the dance of the stars."

This book retraces the exhilarating story of how all that changed, and how we came to perceive the Earth as a "wandering star. But almost as soon as humans started to grasp that Earth is a planet, many also began wondering if perhaps the other planets might be earths. This bold conjecture ignited the whole gripping history and literature of space travel, of extraterrestrials, of other worlds. And yet the thesis that the Universe is full of other worlds like Earth has from the start been fuelled more by imagination than by scientific evidence. For all its appeal, it has consistently been undermined by observations of the actual Universe.

A Universe of Earths offers a surprising alternative to that "other worlds" account, one that releases humans not only from the pre-Copernican view of Earth as low, lowly, dark, a cosmic sump, but also from the persistent modern aspersion of Earth as cosmically ordinary, "mediocre," "dethroned." Instead, from Copernicus to the present, we are confronted with the bracing realization that Earth is in the classical sense a star, a dynamically wandering one, and a bright, maybe even peerless participant in the dance of the stars.

Cosmic Events: The Three Comets of 1618 (Historical & Cultural Astronomy), by Clifford J. Cunningham (Ed) (Springer), Dec 2025, pp.420 (hardback, £129.99), ISBN 9783031869495

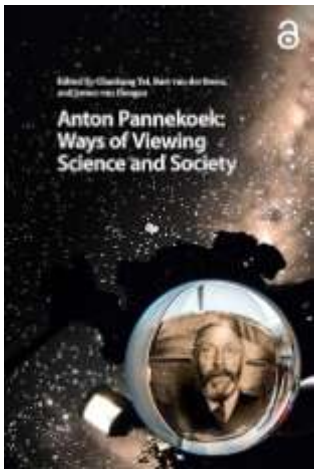


This book showcases a wide-ranging study of the comets of 1618. That year came to be regarded as a turning point in European history, marking the start of the Thirty Years' War, which was the most destructive conflict since ancient Roman times. Even while the Great Comet dominated the night sky in late 1618 and early 1619, the printing presses of Europe began disseminating news about it.

With the combined effort of 11 leading scholars in the history of astronomy, this book details the tremendous influence on human affairs made by the Great Comet and its two less luminous predecessors. Geographically-focused studies are presented on how the comets were studied in Spain, India and China. In England and The Netherlands, the tremendous creation of poetry sparked by the Great Comet is examined in-depth, with implications ranging from religion and politics to the death of members of the Royal Family and the origins of the English Civil War. The first study of an unpublished manuscript from Germany, among the most significant interventions on the comet of 1618, is presented with its magnificent colour illustrations. Other chapters take a broader look on how the comets affected European thought in the visual and cultural arena, shedding new light on the dynamic and complex relationship between natural knowledge, world view, and forms of belief.

Ultimately, this book is written for researchers in historical astronomy and will be an interesting read for armchair astronomers, professionals, historians, and students alike.

Anton Pannekoek: Ways of Viewing Science and Society, by Chaokang Tai, Bart Steen, Jeroen Dongen (Eds) (Routledge), Dec 2025, pp.322 (paperback, £34.39), ISBN 9781041175643



Anton Pannekoek (1873-1960), prominent astronomer and world-renowned socialist theorist, stood at the nexus of the revolutions in politics, science and the arts of the early twentieth century. His astronomy was uniquely visual and highly innovative, while his politics were radical. *Anton Pannekoek: Ways of Viewing Science and Society* collects essays on Pannekoek and his contemporaries at the crossroads of political history, the history of science and art history.

Celestial Sleuthing: More Mysteries in Art, History, and Literature by Donald W. Olson (Springer), Dec 2025, pp.330 (paperback, £24.99), ISBN 9783032099884

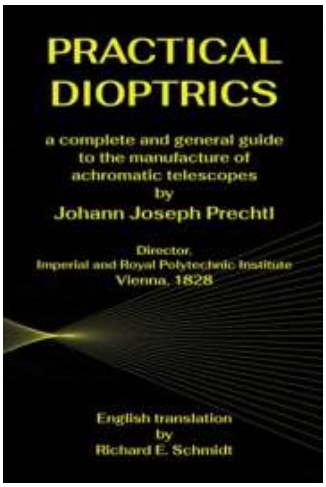
Many mysteries in art, history, and literature can be solved using "celestial sleuthing," including calculating phases of the Moon, determining the positions of the planets and stars, and identifying celestial objects in paintings. In addition to helping to crack difficult cases, such studies spark our imagination and provide a better understanding of the skies. This book shows how weather archives, vintage maps, historical letters and diaries, military records, and site visits aid the work.

For each artwork, historical event, or literary passage influenced by astronomy, there is a different kind of mystery to be solved. For example, how can the position of the Sun and Moon determine the date and time of famous paintings by Vincent van Gogh and Caspar David Friedrich? How can astronomy determine a precise date for a work by Wassily Kandinsky, a painter best-known for abstract works with geometrical shapes

and dramatic colours? What important battle of ancient history caused a design change with a crescent Moon added to the silver tetradrachms of Athens? In what season did Sappho write her iconic work, "The Midnight Poem"?

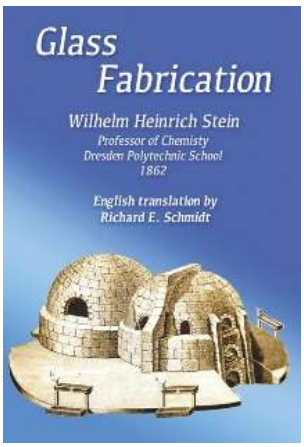
RECENT BOOKS MISSED

Practical Dioptrics: A complete and general guide to the manufacture of achromatic telescopes, by Johann Prechtl, translated by Rich Schmidt (Independently published), Sep 2025, pp. 230 (paperback, £20.78), ISBN 9798263295516.



For the first time in two centuries *Praktische Dioptrik*, J. J. Prechtl's classic 1828 text on the optics of refracting telescopes is available in an accessible English translation. Drawing on the works of Huygens, Fraunhofer, Herschel and others, along with his own extensive experience, the Director of the Vienna Imperial and Royal Polytechnic Institute guides optical artists through every detail in the design and production of perfect telescope optics, from glass melting to grinding and polishing, and collimating objective lenses, providing the modern reader with a fascinating look at early 19th century optical technology. Illustrated with 50 original plates, and featuring an introduction by Richard E. Schmidt.

Glass Fabrication, by Heinrich Wilhelm Stein, translated by Rich Schmidt (Independently published), Oct 2025, pp. 238 (paperback, £16.35), ISBN 9798269338958

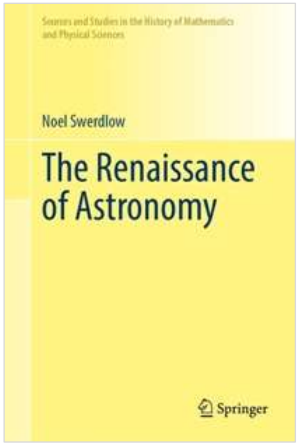


Glass Fabrication by Wilhelm Stein was first published in 1862 as part of the Handbuch der chemischen Technologie.

This first English edition for offers a fascinating introduction to the 19th century world of glass products and their manufacture. Featuring a new intrduction and over 200 illustrations, this volume should be welcome on the bookshelves of all students of technological history.

UTTERLY IMPOSSIBLE NEW BOOKS (desirable, but priced beyond reach)

The Renaissance of Astronomy, by Noel Swerdlow (Springer), Oct 2025, pp.980 (hardback, £249.99), ISBN 9783031847592



The Renaissance of Astronomy provides a comprehensive, technically grounded account of the works of Regiomontanus, Copernicus, Tycho, Kepler and Galileo. There is nothing comparable to it in scope and detail. It is the fruit of a lifetime of study devoted to the subject.

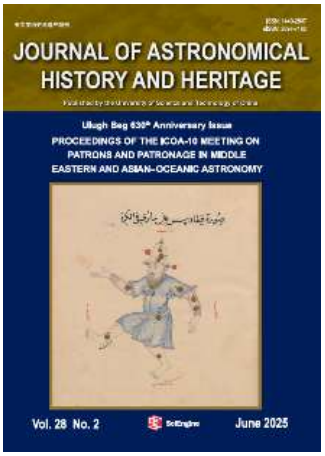
It is the first book to provide systematic, rigorous introductions to the work of the five great astronomers who replaced the geocentric model of the planetary system with a heliocentric one. It also offers novel analyses on many points of detail---for example, the astrological interests and practices of Regiomontanus, Kepler, and Galileo. Technical expositions are accompanied by a very large number of diagrams of high quality, made by the author, Noel Swerdlow. The section on Tycho Brahe was left incomplete at Swerdlow's death.

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.*

WEB-LINKS NOTICED

Journal of Astronomical History and Heritage

The latest issue of the Journal of Astronomical History and Heritage (Volume 28, Issue 2, 2025) is a special Ulugh Beg 630th anniversary issue and is now available for free download.



17th century single lens refractor

A fascinating article by Romanian amateur astronomer, Cotcas Ovidiu, about the making of single lens refracting telescopes in the seventeenth century, appeared on 'Stargazers Lounge' in October 2025.

Cotcas explains: "my main focus is to recreate 17th-century objective lenses using authentic historical methods, carefully combined with modern techniques. This year, I began my largest optical reconstruction project to date — becoming the first, to my knowledge, to polish lenses on paper using dry CeO_2 powder, exactly as described in 17th-century sources.

"Reconstructing these instruments is extremely challenging. In the 17th century, opticians closely guarded their manufacturing secrets, leaving very few detailed technical records. My research began with hunting down rare historical sources. Lucky for me I found references dating between 1640 and 1650 that describe polishing lenses on paper (cloth)—the primary method after 1640, used by masters such as Giuseppe Campani, Eustachio Divini, Christiaan Huygens, and Giovanni Borelli."

Smith's illustrated astronomy

A glimpse at what was taught as currently astronomical knowledge in the mid-nineteenth century. This profusely illustrated book by Asa Smith , published in 1849, "for the use of public or common schools in the United States", is available on the *Smithsonian Libraries* website – along with scanned versions of many other seminal works in the history of astronomy.

Edinburgh: History of Astronomy Tour

This walking tour—guided by a mobile app—of sites of astronomical history interest was developed by 'Curious Edinburgh' with support from the *Institute of Physics in Scotland* and a *British Society for History of Science* Outreach Grant. It includes observatories, memorials, and the houses of past astronomers, such as Mary Sommerville, Thomas Henderson and Charles Piazzi Smyth.

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

History of Australian Astronomy

A History of Australian Astronomy Chapter (HAAC) of the Astronomical Society of Australia. has just been established The first workshop is on **19 Nov 2025** and it is on-line. **SHA members have been invited to attend**, though it is in the afternoon in Australia (3 am – 6.15 am GMT)—that makes it an early session for those in the UK but not impossible, at least for the latter part. It is free. The theme is around the breadth of the history of Australian astronomy.

(NB: Times are Australian Eastern Daylight Time)

2pm *Introduction and acknowledgement of country* (Nick Lomb)
2:10 *Sir Thomas Brisbane's Parramatta Observatory Revisited, 1821–1825* (Mark Rigby and Tom Harradine)
2:35 *Making them visible: women in astronomy in Australia* (Toner Stevenson)
3:00 *Grote Reber in Tasmania* (Martin George)
3:25 *How Australian Astronomers Cooked Up a High-Fibre Diet* (Fred Watson)
3:50 *Indigenous astronomy: history, challenges and what we have learned* (Duane Hamacher)
4:15 *Seeing invisible skies* (Kerrie Dougherty)
4:40 *Narrabri Stellar Intensity Interferometer* (Stephanie Rossini-Bryson)
5pm *Closing remarks*

Hidden Star – The Story of Annie Walker, as opera

Cambridge-based, not-for-profit organisation *Listen!*, under Artistic Director Caroline Coetzee, is currently working on a new opera that brings to life the remarkable story of Annie Walker, a female astronomer working at the Cambridge Observatory between 1881 and 1903.

In 1903, Annie Walker left Britain for Australia. She had lost her job and her home and would never work again.

The *Hidden Star* project gives life to this long-forgotten pioneer in the history of women in science, the first woman in Britain to be professionally employed by an Observatory as an observational astronomer. More than just an opera, this unique project combines science, social history, contemporary music and education.

The producers are working with the Institute of Astronomy at the University of Cambridge (IoA), creating a new chamber opera combined with workshops for children and young people and panel discussions, and introducing a remarkable and inspirational woman. They are creating a lyrical intimate character study using contemporary words and music and asking questions about her fate that still have resonance today

Hidden Star is an ongoing project, parts of which were performed on **5 Oct 2025** at the Cockpit Theatre, in London, but funding is being sought to bring performances of the full opera in **2026**.

Foucault Pendulum at Preston

From 28 Sep 2025

The *Harris Museum & Art Gallery* in Preston has the longest Foucault pendulum in the UK (35 m, compared with the London Science Museum's 22.45m installation). After a £19m transformation project, which included improvements to the pendulum, the Museum has re-opened its doors from 28 Sep 2025.

The Foucault pendulum, originally installed in 1909 and reinstated in 1992, demonstrates one of physics' most elegant proofs of Earth's rotation. As the heavy pendulum swings in a fixed direction relative to the stars, the Earth rotates beneath it, creating the illusion that the pendulum's plane of oscillation is shifting when viewed from the ground.

Professor Derek Ward-Thompson, *Pendulum Project* Adviser and Director of the Jeremiah Horrocks Institute of the University of Lancashire, explained: "What makes this installation special is not just its impressive length, but the sophisticated modern systems we've integrated to ensure reliable, long-term operation. This fusion of historical significance and contemporary technology exemplifies the best of both scientific heritage and innovation."

SHA CALENDAR 2025-26

MONTH	SHA EVENT OR PUBLICATION	VENUE
2025		
JAN	SHA Online Lecture No.19, by **Anna Marie Roos** (22 Jan)	via 'Zoom'
FEB	SHA e-News (1-5 Feb)	
MAR	SHA Online Lecture No.20, by **Bernie Taylor** (12 Mar) SHA-SAF Conference, Paris (28-30 Mar)	Via 'Zoom'
APR	SHA Spring Conference (26 Apr)	Birmingham
MAY	SHA e-News (1-5 May) SHA Bulletin 43 (May)	
JUN	The Antiquarian Astronomer 19 SHA Summer Picnic (27 Jun)	 Jodrell Bank
JUL		
AUG	SHA e-News (1-5 Aug)	
SEP		
OCT	SHA Online Lecture No. 21, on Research Techniques (8 Oct)	
NOV	SHA e-News (1-5 Nov) SHA AGM & Autumn Conference (8 Nov) SHA Online Lecture No. 22, by **Peter Morris** (26 Nov)	 Birmingham via 'Zoom'
DEC	SHA Bulletin 44 (mid-Dec)	
2026		
JAN	SHA Online Lecture No. 23, by **Dava Sobel** (14 Jan)	via 'Zoom'
FEB		
MAR	SHA Online Lecture No. 24, by **James Krehbiel** (17 Mar)	via 'Zoom'