ROYAL MUSEUMS GREENWICH

Observatory Networks Revisited, 26 March 2026

All events will take place in the National Maritime Museum Lecture Theatre

Programme

Time	Speaker	Title
09:45	Registration	
10:00	Welcome and notices	
	Session 1: Observatory people and places **Chair: Louise Devoy**	
10:00	**Megan Briers** Max Planck Institute for the History of Science	Greenwich as a home and observatory: the Airy family and the RGO collections
	Eun-Joo Ahn Yale University [pre-recorded video]	Living the high life on Mount Hamilton
	Toner Stevenson University of Sydney [pre-recorded video]	The Astrographic Catalogue in Australia: perceptions, technologies and buildings 1887-1915
11:00	Tea/Coffee and networking	
11:30	**Session 2: Observatory networks and influences** **Chair: Rebekah Higgitt**	
	Robert Inkpen University of Portsmouth and RMG Caird Research Fellow 2025-26	Knowledge networks of the Royal Observatory Greenwich in the tenure of Airy
	Erin Manson Queen's University Belfast, Armagh Observatory and Planetarium	Decolonising Astronomical Science: The Geopolitically Networked Heritage of Irish Astronomy at Boyden Observatory, South Africa, 1950-1978
	Agnė Poškienė and Julija Jonušaitė-Varapnickienė Vilnius University Museum	The development of the astronomical library at Vilnius Stefan Báthory University Observatory in 1921–1939
	Ileana Chinnici INAF-Osservatorio Astronomico di Palermo **Louise Devoy** Royal Museums Greenwich	A century of exchange between the observatories of Palermo and Greenwich, 1780-1880: advice, data and instruments
12:45	Lunch + opportunity to visit new exhibition **Astronomers Take Over**	
14:00	**Session 3: Observatory technologies in transition** **Chair: Emily Akkermans**	
	Johan Kärnfelt Gothenburg University	When Telescopes End: The Afterlives of Instruments used at Stockholm Observatory 1753-1931

	Matthew McMahon Armagh Observatory and Planetarium	The Grubb 10-Inch Standard Equatorial at Armagh: Science, Spectacle, Nostalgia and Necessity
	Julien Gressot Institut d'histoire, Université de Neuchâtel	From Meridian Circles to Atomic Clocks: When Observatories Lost the Sky
	Sabina Luz Independent Scholar [pre-recorded video]	When time falls: the National Observatory of Brazil, Time Signals and the visuality of time
15:15	Tea/Coffee and networking	
15:45	**Session 4: Observatories today: challenges and opportunities** **Chair: Daisy Chamberlain**	
	George Seabroke Independent scholar	Amateurs teaching professionals: Maunder's spectroscope lesson at the Temple Observatory, Rugby School and Royal Observatory Greenwich's radial velocity measurements
	John Briggs Alliance of Historic Observatories [pre-recorded video]	A Special Interest Group related to Observatory Transit Instruments
	Clive Davenhall Royal Observatory Edinburgh Trust	Refurbishment and Archival Research at the Royal Observatory Edinburgh
	Henry Roberts Royal Museums Greenwich	First Light: Transforming the Royal Observatory Greenwich
17:00	End of daytime programme	

Abstracts

Session 1: Observatory people and places

Chair: Louise Devoy, Royal Museums Greenwich

Greenwich as a home and observatory: the Airy family and the RGO collections

Megan Briers, Max Planck Institute for the History of Science

Recent literature has shown the importance of assessing how narratives were shaped by various archival and documentation practices. In the case of the Royal Observatory Greenwich, George Airy, the British Astronomer Royal from 1835 to 1881, constructed a vast archive to justify the observatory's existence in a period when its stability was under threat. This archive is a key resource for historians of Victorian science, but I will discuss the mechanisms by which the importance of family/domestic practices became concealed by practices of archival organisation and exclusion. There has been little critical attention to choices made in the formation of the observatory's archives: Greenwich was also the site of the Airys' home but an artificial divide between institutional and domestic spaces endures in the archives'

organisation. By re-integrating excluded archive material, I will demonstrate the centrality of family identities and domestic spaces in key episodes in the history of Victorian astronomy, centring women's previously obscured labour in shaping family members' reputations and historical memory.

- *Megan Briers is a third year PhD candidate at the Max Planck Institute for the History of Science in Berlin. Her research interests generally include the history of the physical sciences and gender and science. Her PhD thesis looks at women and gender in 19th-century British astronomical expeditions. Originally trained in mathematics and computer science, she also enjoys working with digital humanities methods, particularly work that aims to visually represent large and complex data sets.*

Living the high life on Mount Hamilton
Eun-Joo Ahn, Yale University [pre-recorded video]

Lick Observatory, located in Northern California, is one of the oldest research astronomical observatories in the American West. Starting its operation in 1888, it is known as the world's first permanently occupied mountaintop observatory. All families related to the observatory, from the director to the janitor, lived on the summit, forming a small colony replete with a one-room school and even its post office. How did the families live up there? What kind of cultural and leisure activities did they do? Using archival material and oral history from children of staff astronomers, I reconstruct part of their lives during the early twentieth century: they organized baseball matches and golf tournaments, wrote plays and odes, and held musical socials. As well as obtaining a glimpse of their lives, it is possible to deduce what activities and material culture represented white middle-class values in an isolated setting. These observations can also help understand white Americans' settler colonialism and how Lick Observatory became a symbol of white American's progress and superiority during the late nineteenth century.

- *Eun-Joo Ahn is an interdisciplinary and cross-disciplinary historian of science. She is a Lecturer in the Physics Department and a Faculty Fellow at the Center for the Study of Race, Indigeneity, and Transnational Migration at Yale University, and a core member of the Asian Americans and STEM initiative at Yale. She is interested in the modern history of physical sciences, where her research includes studying the founding and development of Mount Wilson Observatory (astronomical observatory located in Southern California) in the early twentieth century.*

The Astrographic Catalogue in Australia: perceptions, technologies and buildings 1887-1915
Toner Stevenson, University of Sydney [pre-recorded video]

The Astrographic Catalogue and Carte du Ciel projects align with the development of new technologies to accurately photograph and measure the stars. In Australia participation in these projects in the late 19th and early 20th centuries by Sydney, Melbourne and Perth Observatories was initially well-timed with a boom in the economy that stimulated investment in technology and buildings. This presentation will explore how the changes to these Observatories for the Astrographic Catalogue created an opportunity to increase public awareness of astronomy through the newspapers. In particular, I will examine the way journalists responded to this new type of astronomy and the way they wrote about and pictured that women employed at each observatory to measure the stars.

- *Toner Stevenson is an honorary History affiliate with The University of Sydney. Toner researches the history of astronomy in Australia, in particular women who were the 'hidden figures' essential to research and discovery. Her career includes manager of Sydney Observatory and senior roles at the Powerhouse Museum, the Natural History Museum in London, Museums of History NSW and The University of Sydney. Toner is co-author of the Eclipse Chasers book published by CSIRO in 2023 and she is secretary of the History Chapter of the Astronomical Society of Australia.*

Session 2: Observatory networks and influences

Chair: Rebekah Higgitt, National Museums Scotland

Knowledge networks of the Royal Observatory Greenwich in the tenure of Airy
Rob Inkpen, University of Portsmouth and RMG Caird Research Fellow 2025-26

Using databases of instruments, journal and data exchanges between the Royal Observatory and other institutions and individuals it is possible to obtain a picture of the development of the knowledge exchange network of the Royal Observatory in the nineteenth century. Using Annual Reports to Visitors and the Moveable Property sections of the relevant archival files, two databases of over 1200 items provide the basis for this analysis. The key findings are that the influence of the Royal Observatory as a hub for knowledge exchange was underpinned by a strong, but exclusive social networks; the influence of the Royal Observatory as a knowledge hub waned slowly throughout the century and there were clear spatial patterns in the distribution of instrument and materials within the network.

- *Rob Inkpen is an honorary researcher fellow at the University of Portsmouth. Recently retired, he has returned to his research interest in the nature of historic networks of knowledge and their complex relationships with technology, society and Empire. This research has been aided by the award of a Caird Fellowship which has opened up new sources and ideas for developing this research.*

Decolonising Astronomical Science: The Geopolitically Networked Heritage of Irish Astronomy at Boyden Observatory, South Africa, 1950-1978
Erin Manson, Queen's University Belfast, Armagh Observatory and Planetarium

This presentation aims to contextualise the "first international telescope" (UNESCO, n.d.); the Armagh-Dunsink-Harvard Telescope (ADH) of Boyden Observatory, into the nexus of geopolitical networks, scripts and power-relations which perpetually impacted upon its conception, negotiations and subsequent demise, amid the backdrop of Apartheid South Africa and international boycott. The ADH reinvigorated Irish astronomical science in the post-WWII period, situating Armagh and Dunsink Observatories into a prestigious global network through their international partners in the Boyden Council, which maintained the observatory from 1955 until 1976.

Consequently, this presentation aims to build upon Swanner's (2017) theorisations which posit that socially-inflected astronomical science has the capacity to influence and perpetuate geopolitical events and colonial epistemic power-relations, just as they are impacted by them. Thus, this presentation will situate Boyden spatially and temporally within its geopolitical

contexts and impacts, particularly through the analysis of an unconscious perpetuation of Cold-War logics and the asymmetrical power/knowledge hierarchies of Apartheid.

- *I am a First Year PhD researcher in Geography at Queen's University Belfast and Armagh Observatory and Planetarium. Through the study of the lifespans of Ireland's three historic observatories (Armagh, Birr and Dunsink), my research aims to analyse the contextual social, cultural and geopolitical influences upon astronomy in Ireland through the late 18th Century to the present, and also extrapolates how Irish astronomy has culturally and geopolitically impacted power-relations both in Ireland and globally through astronomy's international networks.*

The development of the astronomical library at Vilnius Stefan Báthory University observatory in 1921–1939
Agnė Poškienė and Julija Jonušaitė-Varapnickienė, Vilnius University Museum

The Vilnius University Observatory, established in 1753, accumulated a significant library of astronomical publications; its closure in 1883 halted the library's development. In 1919, when Vilnius University was re-established under the name of Stefan Báthory, astronomical research also started. Along with the observatory buildings and instruments, an astronomy library was formed in 1921. However, there was a lack of the latest and periodically published scientific publications from foreign observatories to support further research development. On the initiative of the observatory director, Władysław Dziewulski (1878-1962), the periodical journal "Bulletin of Vilnius Astronomical Observatory" was started in 1921. That causes the possibility of renewing contacts with foreign observatories and exchanging scientific publications. In this presentation, we will discuss the following questions: How was the observatory library assembled? What publications were collected? In presentation we aim to evaluate the significance of the bulletin and its role in observatory relations with foreign observatories, and the growth of the library.

- *Agnė Poškienė is an educational program coordinator at Vilnius University Observatory of Ideas. In 2024 she was awarded the Vilnius City History Research Fellowship to research the history of the Vilnius University Observatory. Published articles: 'The Bulletin of the Vilnius astronomical observatory: a comprehensive overview (1960–1992)'; 'Addidit antiquo virtus nova lumina coelo: The Establishment and Activity of the Astronomical Observatory at Vilnius Stefan Batory University in 1919–1939'. IAU National Outreach Coordinator in Lithuania.*
- *Julija Jonušaitė-Varapnickienė is from Vilnius University Museum.*

A century of exchange between the observatories of Palermo and Greenwich, 1780-1880: advice, data and instruments
Ileana Chinnici, INAF-Osservatorio Astronomico di Palermo
Louise Devoy, Royal Museums Greenwich

In this paper we will explore the intermittent but influential connections between the observatories of Greenwich and Palermo during the period 1780-1880. Giuseppe Piazzi, founder of the Palermo Observatory, spent a long time in London sourcing high-quality instruments for the new observatory. He visited Nevil Maskelyne at the Royal Observatory, Greenwich, and relied on the Astronomer Royal for an introduction to the instrument maker

Jesse Ramsden, to whom Piazzi commissioned the famous large Palermo Circle that remains in situ today.

Excerpts from Piazzi's works were later translated into English by Maskelyne's daughter, Margaret. We can also see from the library records how the two institutions kept abreast of each other's work through the exchange of publications.

From archival documents dating back to the later decades of George Biddell Airy's directorship, we can also see the direct exchange of instruments that were initially tested and recommended by astronomers at Greenwich before transfer to Palermo, most notably a regulator and a marine chronometer, which were acquired by Gaetano Cacciatore, director of Palermo Observatory, and are now preserved in the Specola Museum.

- *I am astronomer at INAF Palermo Observatory and my research work is mostly focused on history of 19th-century astronomy. I have published various books and articles in specialized journals and I have been awarded the Osterbrock Book Prize 2021. I have been curator of the observatory astronomical museum and now I am scientific advisor for the observatory historical collections. In the past years, I have been chairperson of the IAU Working Group on Archives and am currently President of the Scientific Instrument Commission and member of the Council of the Italian Astronomical Society.*
- *Louise Devoy is Senior Curator of the Royal Observatory, Greenwich and specialises in the stories of the buildings, instruments and people who lived and worked here. She is author of 'Royal Observatory Greenwich: A History in Objects' (2025) and is working on the 'First Light' project in providing content for new galleries scheduled to open in 2028.*

Session 3: Observatory technologies in transition

Chair: Emily Akkermans, Royal Museums Greenwich

When Telescopes End: The Afterlives of Instruments used at Stockholm Observatory 1753-1931
Johan Kärnfelt, Gothenburg University

Scientific instruments – telescopes in particular – often remain in service for decades. Yet all instruments eventually reach the end of their primary scientific careers. They may become technologically obsolete, mechanically exhausted, or simply superseded by more capable successors. Importantly, this end point does not necessarily mark the conclusion of an instrument's life. Rather, instruments frequently enter new phases: they may be repurposed, reconstructed, cannibalized for parts, or relegated to basements and attics. Some later re-emerge, are restored, and assume new identities as museum objects or historical artefacts.

This presentation draws on the concluding chapter of a book-length study on the history of the Stockholm Observatory. It examines the post-observatory trajectories of the instruments used during the observatory's nearly two-century operational span, tracing how these objects moved through cycles of obsolescence, reuse, abandonment, and heritage formation after the observatory's closure in 1931.

- *Johan Kärnfelt is an associate professor of the History of Ideas and Science at the Department of Literature, History of Ideas, and Religion, University of Gothenburg.*

The Grubb 10-Inch Standard Equatorial at Armagh: Science, Spectacle, Nostalgia and Necessity
Matthew McMahon, Armagh Observatory and Planetarium

The Grubb 10-inch at Armagh Observatory was constructed and installed in 1885 under the newly appointed Director, Dr. John Louis Emil Dreyer. The 'Standard Equatorial' as it was marketed by Grubb represented a new era of astronomy equipment for the Armagh Observatory, but came during a period of intense change, and was arguably not fit for the new astrophysical landscape it found itself in. It survived, and remained in use for scientific work, inspiring new generations, and building the reputation of the institution. This paper seeks to document the origin of the design of the 'Standard Equatorial' and show the network of connected instruments, structures and people who perceived and portrayed it through many lens of over the decades and centuries.

- *Matthew McMahon is a part-time PhD candidate specialising in historical and cultural geography. He is researching the planetarium as a place of education, performance and scientific study over the previous century. He is also the Museum Collections Officer for the Armagh Observatory and Planetarium, responsible for the archive and historical collection of over 35,000 entries. His work supports the growing History and Geography Research Programme at the Armagh Observatory and Planetarium, as well as the Astronomical Observatories of Ireland UNESCO World Heritage Bid.*

From Meridian Circles to Atomic Clocks: When Observatories Lost the Sky
Julien Gressot, Institut d'histoire, Université de Neuchâtel

This paper examines the transformation of astronomical observatories from sites devoted to celestial observation into participants in broader regimes of time production. Focusing on the transition from meridian circles to atomic clocks, it argues that the advent of quantum physics redistributed temporal authority across observatories, laboratories, and metrological institutions.
In the nineteenth century, observatories structured time through astronomical observation, linking the motion of the heavens to navigation, geodesy, and state administration. During the twentieth century, rising demands for precision fostered atomic standards of time, often developed in laboratory settings. This shift did not signal the decline of observatories but redefined their role within a heterogeneous landscape in which astronomical and atomic references coexisted, competed, and were progressively integrated.

By tracing these reconfigurations, the paper highlights observatories as hybrid spaces at the intersection of astronomy, physics, and metrology, where atomic clocks were tested, compared, and calibrated, and where new temporal standards were evaluated rather than simply disseminated.

- *Julien Gressot is currently a Postdoctoral Researcher at the University of Neuchâtel. His research focuses on the development of atomic clocks and on the broader reconfiguration of temporal infrastructures, examining how scientific, technical and institutional changes reshape the production and governance of time.*

He also serves as Scientific Director of an exhibition project dedicated to the Neuchâtel Observatory, developed collaboratively across three museums. In addition, he is the organiser of the SIC conference to be held in Neuchâtel, September 2026.

When time falls: the National Observatory of Brazil, Time Signals and the visuality of time
Sabina Luz, Independent Scholar [pre-recorded video]

Accurate timekeeping was essential for the regulation of marine chronometers used in navigation, as well as for the operation of railroads, both of which were central to the expansion of commerce, the circulation of goods and people, and, more broadly, the development of capitalism. Rio de Janeiro was one of the most important ports on the South Atlantic coast, making the availability of a reliable time signal crucial for the regulation of marine chronometers in its harbor. The Imperial/National Observatory of Brazil installed a time ball system on its terrace that functioned from the mid-nineteenth century until 1920, providing an accurate time, following a practice in use at the Greenwich Observatory since 1833. Originally conceived as a utilitarian device, the observatory time signal soon became a key temporal reference for the surrounding urban space. In Brazil, during twentieth century, it became common practice to adjust clocks by observing the daily fall of the time ball. This paper examines the connections between the scientific activities of the Imperial/National Observatory of Brazil and the cultural appropriation of this visual technology of time.

- *Sabina Luz is a historian of science specializing in the history of astronomy, timekeeping, and scientific institutions. She holds a PhD in History from the Federal University of the State of Rio de Janeiro (UNIRIO, 2023) and was a research fellow at the Museum of Astronomy and Related Sciences (MAST) in Brazil several years. Her work examines the relationship between science, technology, and international scientific organizations, particularly Brazil's role in international timekeeping service during the late 19th and early 20th centuries.*

Session 4: Observatories today: challenges and opportunities

Chair: Daisy Chamberlain, Royal Museums Greenwich

Amateurs teaching professionals: Maunder's spectroscope lesson at the Temple Observatory, Rugby School and Royal Observatory Greenwich's radial velocity measurements
George Seabroke, Independent Scholar

The 1902 meeting of the British Astronomical Association reported that "One of the first things … [Edward Maunder] had done on entering Greenwich Observatory [in 1874] was to go down to Rugby to see Mr. Seabroke, who had given him some lessons on the use of a particular form of spectroscope which Mr. Seabroke had devised." No reference to this has been found in the Royal Observatory Greenwich (RGO) archives. While I cannot add any details about this, I will present the context of how Seabroke, an amateur astrophysicist at the Temple Observatory at Rugby School, came to provide spectroscope lessons to Maunder, the first professional astrophysicist at the RGO. Both men used these new instruments to make pioneering measurements: the first surveys of stellar radial velocities, which could be linked to current exoplanet discoveries. Reconnecting these two observatories again should be mutually beneficial: the Temple Observatory observing logs may be able to fill in gaps in the RGO history, while the link to the RGO can only help the efforts to repair the Temple Observatory's 8.25-inch 1859 Alvan Clark telescope in time for the observatory's 150th anniversary in 2027.

- *I am a professional astrophysicist (Principal Research Fellow) based at the Mullard Space Science Laboratory (MSSL), University College London, measuring radial velocities (RVs) with the RAdial Velocity Spectrometer onboard the European Space Agency's Gaia satellite. After choosing to do my astrophysics PhD (Cambridge) on measuring RVs, I found out that my great-great-grandfather and namesake, George Seabroke (1848-1918), was an amateur astronomer who conducted one of the first pioneering RV surveys. I started working on Gaia in 2007 at the Open University before arriving at MSSL in 2010.*

A Special Interest Group related to Observatory Transit Instruments
John Briggs, Alliance of Historic Observatories [prerecorded video]

At the 2025 General Assembly of the Alliance of Historic Observatories meeting at Lowell Observatory, a new Alliance member institution, Elgin Observatory of Elgin, Illinois, USA, described its main instrument, a transit telescope made by Warner & Swasey circa 1910, and its related apparatus including a chronograph and two Riefler clocks. Ensuing discussion revealed general interest among a number of Alliance member institutions and individuals to learn more about transit telescopes and related instruments & systems. Interest included learning about both how to best care for them and about how they were used. Interest included the potential to renew actually using some transits in educational ways. This presentation will report ongoing related discussion and will welcome any others who are interested.

- *John W. Briggs serves as Secretary of the Alliance of Historic Observatories in his retirement from a career in instrument engineering and observatory operations at wide-raging facilities. He lived and worked at Mount Wilson, Yerkes, Sacramento Peak, and other sites in various technical capacities, including a winter-over at South Pole Station in 1994. He has served three terms as president of the Antique Telescope Society and is the 2025 recipient of the G. Bruce Blair Medal of the Western Amateur Astronomers.*

Refurbishment and Archival Research at the Royal Observatory Edinburgh
Clive Davenhall, Royal Observatory Edinburgh Trust

The Royal Observatory Edinburgh (ROE) dates from the early 19th century and moved to its current location on Blackford Hill in the 1890s. The buildings from this time survive and are listed as Scottish Category A. A major refurbishment of the main Observatory building is currently being planned and will be briefly described. The Observatory has archives that are well-organised to about 1960. In preparation for the refurbishment more recent items are being sorted and indexed, which has revealed much interesting material. Three projects from the 1960s and 1970s will be briefly mentioned as examples: (i) a programme of UV astronomy from Skylark sounding rockets and an associated project to develop a UV spectrophometer for the ESRO satellite TD1-A; (ii) a satellite tracking programme and (iii) an extensive programme of site testing of possible locations for overseas mountain-top observatories. Since its relocation in the 1890s the ROE has been deeply involved in the development of new astronomical techniques and instrumentation, of which the three programmes mentioned here are just examples. Much of this work offers scope for further investigation and appraisal.

- *I am Secretary to the Royal Observatory Edinburgh Trust and actively involved in preparations for the refurbishment of the Main Observatory building, particularly in*

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sorting and indexing more recent archival material. I have written and given talks on the history of astronomy for many years. I am retired having previously worked in the Institute for Astronomy, University of Edinburgh. I am a Founder-Member of the UK Society for the History of Astronomy, a Fellow of the RAS and a member of the Edinburgh Bibliographical Society.

First Light: Transforming the Royal Observatory Greenwich
Henry Roberts, Royal Museums Greenwich

Over the past 65 years, the Royal Observatory Greenwich has become a major tourist destination and cultural institution, sitting as part of a collection of historical sites including the National Maritime Museum, Cutty Sark, and the Queen's House. As is the case with many historic observatories, the site has seen much change over time, leading to the current array of buildings which were never intended for visitors, and are difficult for audiences to navigate. *First Light* is a major capital project which intends to reunite the north and south parts of the site, both physically and conceptually - blending the themes of time and astronomy, as well as historic and contemporary science.

The ambition of the project extends to every aspect of the site, transforming the visitor experience to address the needs of local and national audiences, particularly inter-generational groups. This presents additional challenges for the galleries to the north, where visitor feedback tells us that stories relating to time, longitude and historic astronomy are hard to penetrate, and that current galleries are static and lacking in opportunities for engagement. We want to ensure that people of all ages can enjoy what the ROG has to offer, engaging with the heritage of the site as well as the stories on gallery.

This presentation will introduce key parts of the new visitor journey and interpretation scheme across the north part of the site, highlighting where there are moments to learn, time to think, opportunities to reflect and space to have fun, building confidence and scientific literacy through different forms of engagement. In doing so, the project seeks to reimagine one of the most important scientific sites in the world, reigniting a sense of wonder, both in this special place and in the subject of astronomy more widely.

- *My interest in museum work began as a CDA research student for the Science Museum, focused upon the history of audience thinking at the Museum during the 'interactive turn' of the 1970s and 80s. This led to roles within both the Curatorial and Exhibitions departments at the Science Museum, mostly relating to contemporary science projects. In January 2024, I moved to RMG as Exhibitions Interpretation Curator, principally to help develop the content and narrative for new permanent galleries as part of the First Light project team.*

End