



## Spring Conference 2024 Theme for the day – "Astronomers Royal " Held on Saturday 20<sup>th</sup> April – A Report by Gerard Gilligan.

As the month of April approached its closure, astronomical historians from all corners of the United Kingdom assembled at the Birmingham & Midland Institute, in the centre of the City of Birmingham to celebrate the lives and work of several past Astronomers Royal. Almost sixty delegates and their guests were treated to presentations from a stellar line up of renowned speakers. The conference also saw several special guests along with family members of past Astronomers Royal in the audience.

The day began with a welcome from the Society Chair Carolyn Kennett, who introduced a special recorded video question and answer session with the present and fifteenth Astronomer Royal, Sir Martin Rees, Baron Rees of Ludlow. Society Council member, John Chuter asked several questions ranging from what being the Astronomer Royal means personally, which past Astronomer Royal does Sir Martin admire the most, and how he thinks the role has changed from when it was first created in 1675, a role which will celebrate its 350<sup>th</sup> anniversary in 2025.

The first speaker for this special conference was Dr Emily Winterburn, who has been associated with the Society since its foundation in 2002. She was the first chair and is currently SHA Vice-President. In the past she has worked at the Royal Observatory Greenwich, completed her PhD, and has written several books on the history of science. The subject of her presentation was AR Sir William Christie, who modernised the RGO during his term of office, and forged links with many other observatories, including the first international scientific projects and the Carte du Ciel. Emily also focused on Christie's bold choice to employ women as "computers."

Dr Winterburn was followed by Dr Lee Macdonald, a long-term member of the SHA, and the author of several astronomical history books, and who has just completed a new book on the Royal Observatory, Greenwich in the 1881-1939 period. Lee's talk concerned Sir Harold Spencer Jones (1890 – 1960), who served as AR between 1933 to 1955, a time of rapid change in the science of astronomy and in the wider world. During his time in the role of AR he oversaw the move of the RGO from its London site to Herstmonceux Castle in Sussex. Sir Spencer Jones made contributions to astronomy in his measurement of the Earth-Sun distance and the discovery of the Earth's irregular rotation.

The conference lunch break followed, with delegates and their guests taking advantage of the BMI's own fine cafeteria and coffee room. The Society library located in the basement of the venue was opened especially for the meeting, and there was a sale of second-hand astronomy books, with many on sale for just £1.00. Also on sale were several of the Society produced booklets on the Astronomer William Lassell, plus the recently published biography of Astronomer Royal George Biddell Airy by the SHA President Allan Chapman, who was on hand to sign his newly updated booklet, "Three North Country Astronomers"

The next presentation on the program was given by Emeritus researcher Dr Peredur Williams from the University of Edinburgh, Institute for Astronomy, located at the Royal Observatory Edinburgh. Peredur's subject was the third Astronomer Royal for Scotland, Ralph Copeland who studied astronomy in Germany and then joined the 2<sup>nd</sup> German North Polar expedition to Greenland to assist with a geodetic survey, during which he survived an encounter polar bears and very cold temperatures. Copland later had spells in Ireland at Lord Rosse's observatory and at the Dunsink Observatory. He also served as Director of the Dun Echt observatory, established by Lord Lindsay, at which Copland took over from David Gill.

Copeland is known for developing connections with observatories around the world and with amateur astronomers in Great Britain, and his studies of novae and comets using spectroscopy. In 1889 Copland succeeded Piazzi Smyth as Astronomer Royal for Scotland, and soon was instrumental in the selection of a site for the then new site for the Royal Observatory, and the design of its buildings, together with the transfer of telescopes and other instruments.

Our fourth speaker for the day was Richard Ellis, Professor of Astrophysics from the University College London (UCL). An active observational astronomer who studies the distant Universe with a variety of facilities both on Earth and in space, including the Hubble and the James Webb space telescopes. Richard's research interests include cosmology – the form and content of the Universe as a whole – and the evolution of galaxies over cosmic time. He has been influential in making many discoveries in these areas. Richard has received many awards for his contributions to international science, and for this was awarded a CBE by the late Queen Elizabeth II.

His presentation was a personal reflection on his long-time colleague and close friend at Durham University Sir Arnold Wolfendale, the 14<sup>th</sup> Astronomer Royal, and Vice-President of the SHA. Sadly, Sir Arnold died away in 2020. In an academic career that spanned over 50 years, Arnold Wolfendale was an international leader in the field of cosmic-ray and gamma-ray astronomy. This achievement led to the establishment of a major group at Durham, in which Richard played a major part under the guidance of Sir Arnold. Following his appointment as Astronomer Royal in 1991 he used the role to advocate for improvements in the provision and funding for the public understanding of science. Richard painted a great legacy left by Sir Arnold in terms of the Durham contributions to UK's large ground-based telescopes, his support of modern-day armature astronomy, and of the SHA as its Vice-President. During his presentation Richard tells the story of Sir Arnold seeing a recent graduate of Physics throwing a number of Physics books into a nearby river, one of which was a book written by Sir Arnold. When asked why he did not stop the person from carrying out this terrible act, Sir Arnold replied "......I was just so glad he took my book out of the library......"!

Following a break for tea, Coffee and some light refreshments, the Conference was concluded by the second Michael Hoskin Memorial Lecture. Given this year by Dr John Fisher. John is a well-known independent scholar and one of the first graduating students from the Open University. Dr Fisher is a long time and much accomplished historian and lectures in astronomy and associated sciences. Following his doctoral studies at Imperial College London on the work of the 3<sup>rd</sup> Astronomer Royal, James Bradley, John found that there was no record of a modern biography of Bradley so decided to write one! This was indeed published at the close of 2023, and before being introduced by SHA President Dr Allan Chapman, a close friend, John was signing several copies for meeting delegates.

There was little surprise to hear Dr Fisher speak on James Bradley, a little-known holder of the post of Astronomer Royal. He is however known for the discovery of the aberration of light, and after many years of observations to the other discovery of the nutation of the Earth's axis allowing astronomers to determine the precession of the equinoxes that had remained elusive for almost 2,000 years. Bradley was involved in a major reform of the Royal Observatory and its buildings. Leading to the New Observatory through which the Prime Meridian passes today.