Royal Astronomical Society's Bicentenary Timeline

ACKNOWLEDGEMENTS

Many people have helped create our Bicentenary Timeline. Please take a look as all the people involved here, as well as all the image descriptions and credits:

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With special thanks to:
RAS Staff, especially Lucinda Offer and Sian Prosser

IMAGE CREDITS

1820, January: OUR SOCIETY BEGINS
The foundation dinner, attended by 14 gentlemen, takes place at the Freemasons' Tavern in London on 12 January 1820.

Image credit:
Watercolour of the Freemasons' Tavern by John Nixon c.1800:

1820: FIRST MEETING
First meeting on 8 February but adjourned to 24 February to respect the King's recent death.

Image credit:
Minutes of the first Ordinary Meeting
RAS Papers 7

1820: ROYAL SOCIETY CLASH?
Duke of Somerset elected President 29 February. He resigns under pressure from Sir Joseph Banks, President of the Royal Society, over concerns RAS will compromise the existence of the then-named Royal Society of London for Improving Natural Knowledge.

Image credit:
Portrait of Joseph Banks
Engraved by K. Mackenzie
© Royal Astronomical Society/Science Photo Library

1820, November: A FIRST HOME
Our Society moves to rooms in Lincoln's Inn Fields.

Image credit:
57-60 Lincoln's Inn Fields, c. 1882
© Royal Academy of Arts, London. Photographer: Prudence Cuming Associates Limited.

1820, December: EARLY FLIGHT
French geophysicist Jean-Baptiste Biot, who was on board the first scientific hot air balloon ride measuring the Earth's magnetic field, is the first elected Associate Member.

Image credit:
Air balloon from allegorical drawing
Engraving by Jean Claude Desrais © Royal Astronomical Society

1821: LEADING LIGHT
Sir William Herschel, the most famous astronomer of the time, becomes first President.

Image credits:
William Herschel's discovery of Uranus, 1781
Portrait of William Herschel by William Artaud
William Herschel's galactic model, 1784
All images © Royal Astronomical Society/Science Photo Library

1821: HENRY COLEBROOKE, PRESIDENT 1823 - 1825
Henry Colebrook deputised for William Herschel during his last days in 1821, before being elected the second President of the RAS.

Image credit:
Portrait of Henry Colebrooke
© Royal Astronomical Society/Science Photo Library

1822: MEMOIRS BEGIN
Memoirs becomes our first official document, kicking off our key role as publishers and disseminators of first-rate astronomical research.

Image credit:
Memoirs of the RAS, volume 1
Plate from volume 1, MMRAS
Images © Royal Astronomical Society

1822: MACHINE TIMES
Founding member Charles Babbage, the originator of modern computing, explains how his invention, the ‘Difference Engine’ will transform astronomy with its ability to perform and print astronomical calculations more reliably than can be done by hand.

Image credits:
Portrait of Charles Babbage
© Royal Astronomical Society/Science Photo Library
Charles Babbage's Difference Engine No.1
© Lynda Laird/Royal Astronomical Society

1824, 13 February: 1ST AWARD OF THE GOLD MEDALS
Charles Babbage received his gold medal for the Difference Engine.
Johann Franz Encke received his gold medal for identifying the orbit of the comet named after him.

Image credits:
Isaac Newton on the reverse of the gold medal
Herschel Telescope on front of the gold medal
Encke's Comet drawn by W.H. Smyth
All images © Royal Astronomical Society/Science Photo Library

1827
Our journal, Monthly Notices, begins.

Image credit:
Reprint of the MNRAS volume 1
© Royal Astronomical Society

1828: CAROLINE HERSCHEL STRIKES GOLD
Caroline Herschel is the first woman to receive a Gold Medal, recognising nearly fifty years of work on comets and especially nebulae.

Image credits:
Portrait of Caroline Herschel
© Royal Astronomical Society/Science Photo Library
Caroline Herschel's third comet discovery
RAS MSS Herschel C/1.2
© Royal Astronomical Society

1831: BY ROYAL APPOINTMENT
Royal Charter allows the Astronomical Society of London to become the Royal Astronomical Society.

Image credit:
Charter of the Royal Astronomical Society, 1831
© Royal Astronomical Society/Science Photo Library

1834 - 1838: JOHN HERSCHEL SURVEYS SOUTHERN SKIES
Three times RAS President Sir John Herschel undertakes extensive telescopic observations in the Southern Hemisphere from his base in Cape Town, complementing his father William's studies of the Northern Hemisphere. Sir John will become one of the greatest British scientists of the 19th century, founder of key photographic techniques, a great friend of Charles Babbage and an influence on the founder of the theory of evolution Charles Darwin.

Image credit:
John Herschel's 20-foot telescope
© Royal Astronomical Society/Science Photo Library

1835, February: AGM WELCOMES WOMEN
We hold our first AGM at Somerset House in London, where we will remain for 40 years. Caroline Herschel and Mary Somerville are the first women to be elected Honorary Members.

Image credits:
Portrait of Mary Somerville
Wellcome Collection
Attribution 4.0 International (CC BY 4.0)
Somerville's presentation copy of Mechanism of the Heavens
© Royal Astronomical Society

1836: BAILY'S BEADS
During the 15 May 1836 solar eclipse founder member Francis Baily observes and describes the way in which the Moon's rugged landscape creates small 'beads' of sunlight around the shadow's edge as the Sun re-emerges. Baily serves as our President four times between 1837-1844.

Image credits:
Portrait of Francis Baily by Thomas Phillips
© Royal Astronomical Society/Science Photo Library
Baily's beads (1836) and 1769 Venus transit
RAS MSS Baily 7.2
© Royal Astronomical Society
Baily's beads seen during 2017 eclipse
ESA
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1838, 9 November: HOW FAR AWAY ARE THE STARS?
Friedrich Wilhelm Bessel's paper at an ordinary meeting outlines the first reliable measurement of the distance to a star – 61 Cygni – using the "parallax method", which concentrates on the tiny shift of the star relative to its background as the Earth orbits from one side to the other of the Sun.

Image credits:
Heliometer similar to that used to detect parallax
An astronomer observes the night sky.
Both images © Royal Astronomical Society/Science Photo Library

1839, December: PIONEER OF PHOTOGRAPHY
John Herschel takes a photograph of his father William's great 40ft reflector telescope at Slough. It becomes the central icon of the Common Seal of the Society and the image is one of the earliest surviving glass plate photographs.

Image credit:
John Herschel's photograph of 40-foot telescope
© Royal Astronomical Society/Science Photo Library

1846: GREAT MINDS DISCOVER NEPTUNE
The simultaneous prediction of Neptune by John Couch Adams (UK) and Urbain Le Verrier (Fr) leads to intense debate at the Society and tests Anglo-French scientific relations. Both are eventually recognised for predicting the planet, but Le Verrier's data made it possible to find it in the sky.

Image credits:
Diagram published in The Illustrated London News, with a letter by James Glaisher.
© Royal Astronomical Society
Portrait of John Couch Adams
© Royal Astronomical Society/Science Photo Library
Portrait of Urbain le Verrier
© Royal Astronomical Society/Science Photo Library
Voyager 2 image of Neptune
NASA/JPL, Standard NASA licence

1849: SHOOTING THE MOON
William Cranch Bond is the first American member of the Society. With his son, Bond had discovered Hyperion, the 8th moon of Saturn and Saturn's Crepe Ring. He also made one of the first daguerreotypes of the Moon, reinforcing the central role of astronomers in the development of photography.

Image credit:
Daguerrotype by Whipple and Bond, 1851
George Philips Bond and John Adams Whipple
© Science Museum/Science & Society Picture Library

1851: PRIME MERIDIAN ESTABLISHED
George Biddell Airy, the Astronomer Royal from 1835, set up the Prime Meridian at the Royal Observatory, Greenwich. It became the international standard in 1884.

Image credits:
Chromolithograph of Royal Observatory Greenwich, 1851
George Airy portrayed by Anna Airy
Both images © Royal Astronomical Society/Science Photo Library

1859, 1 September: SUN SPARKS VICTORIAN INTERNET
The 1859 "Carrington Event" is the largest recorded geomagnetic storm. Richard Carrington's report to Monthly Notices details the solar flare that caused electrical sparking across the network of telegraph poles that formed the "Victorian internet". With our current reliance on satellite technologies, aviation and mobile communications, if Earth were to be in the path of an equally powerful storm today life as we know it could be altered for days, months or years – with trillions of pounds worth of damage.

Image credits:
Earth's magnetic field protects the planet
ESA/ATG medialab
Richard Carrington's diagram of the solar flare
RAS MSS Carrington 1.3

1862: HONORARY MEMBER AND PATRON
Anne Sheepshanks is the third woman to become an Honorary Member. She is recognised for her generous patronage, including donating her brother Richard Sheepshanks' extensive collection of telescopes and instruments to the Society, making them available for use by other astronomers.

Image credit:
A telescope donated by Anne Sheepshanks
RAS Instruments, Sheepshanks no. 11 telescope

1864: INTO THE LIGHT
William Huggins and William Miller investigate the starlight dispersed by a prism into spectra, proving that the physical and chemical conditions of stars and nebulae may be worked out from their light. Willam later worked with his wife Margaret to demonstrate the gaseous nature of "planetary nebulae", the clouds of gas and dust ejected by Sun-like stars at the end of their lives.

Image credits:
Portrait of Margaret Huggins

Huggins' collaborator, William Allen Miller

Portrait of William Huggins

Spectra
Philosophical Transactions of the Royal Society
Solar and stellar spectra.
Frontispiece of The Heavens and their Story by E.W. and A.S.D. Maunder (1908)

Spectra of Sun, Vega, Scheat and Betelgeuse
Mary Proctor's public lecture lantern slides

Spectra of the Sun and stars
An Atlas of Representative Stellar Spectra by Sir William and Lady Margaret Huggins (1899)

1865: 500 MEMBERS AND GROWING
The number of RAS members exceeds 500.

1870: GOLDEN YEARS
50th-anniversary dinner held at Wills' Rooms, King Street, St James' London. Dining is an important part of the early years; the RAS Dining Club still meets. Conversation and sharing of ideas and news are at the heart of the RAS, its related clubs and events programmes.

Image credit:
Invitation to the 50th-anniversary dinner
RAS Papers 102

1872: CHINTAMANNY RAGOONATHA CHARY, FIRST INDIAN FELLOW
Chary, of the Madras Observatory, India, was also known for his book on the transit of Venus published in English and seven Indian languages: Sanskrit, Kannada, Tamil, Telugu, Urdu, Malayalam and Marathi.

Image credit:
Transit of Venus pamphlet
RAS Tracts

1874: SIZING THE SOLAR SYSTEM
Observing the regular but rare transit of Venus - its movement across the Sun - is how 18th- and 19th-century astronomers measure the size of the solar system. The length scale this provides sets the scale for measurement of distances to the stars.

Image credit:
Our solar system (not to scale)
NASA

1874: SIZING THE SOLAR SYSTEM
Observing the transit of Venus in different parts of the world was a goal of 19th century astronomers. Australian astronomer Henry Chamberlain Russell organised expeditions to observe this phenomemona at four locations in New South Wales in 1874. He submitted a report to the Royal Astronomical Society, which holds many observations of the transit in its library and archives.

Image credit:
H.C. Russell's book on Transit of Venus

1874: BURLINGTON HOUSE
We move from Somerset House to new premises in Piccadilly. Burlington House becomes our new home.

Image credit:
Burlington House viewed from Piccadilly

1875: DRAWN TO ASTRONOMY
Master astronomical draughtsman and engraver William Henry Wesley becomes Assistant Secretary. His record of observed solar eclipses up to 1878 is published in Volume 41 of Memoirs. Even at the dawn of photography, drawing is essential to capturing and conveying astronomers' discoveries. Many practitioners employ both skills simultaneously.

Image credit:
1870 eclipse, based on Brothers' photographs
RAS MSS Add 203/5

1877: ANOTHER NEW PLANET?
We are involved in the search for the planet Vulcan which is incorrectly thought to be orbiting closer to the Sun than Mercury: nothing is found. Orbital discrepancies for Mercury are later explained by Einstein’s General Theory of Relativity.

Image credit:
Map of solar system featuring Vulcan
Library of Congress

1877, April: WHAT SHINES SHOULD BE OBSERVED
First publication of The Observatory, which carries accounts of the Society’ s meetings and is still published today.

Image credit:
First issue of The Observatory

1887: DECISIVE MOMENT
Eight Council members attend an international astrophotographic conference in Paris and we establish our own Photographic Committee. Before astrophotography, each star is individually discovered and plotted. Now they may be observed together as 'fields' in increasing depth and detail.

Image credits:
Delegates at the Astrographic Congress, 1887

Andromeda nebula by astrography pioneer Isaac Roberts

1890: BRITISH ASTRONOMICAL ASSOCIATION BEGINS
The RAS supports the foundation of the British Astronomical Association, now recognised as one of the world's leading amateur groups, who often contribute significant observations to professional programmes.

Image credit:
The BAA's observing sections include the meteor section. Cover of Meteors, Aerolites and Falling Stars (T.L. Phipson, 1867)

1892, February: WHY NOT SHE?
Elizabeth Brown, Alice Everett and Annie Russell Maunder are rejected as Fellows, because the Royal Charter only refers to Fellows as 'he'. Isis Pogson had been turned down for Fellowship in 1886, for the same reason.

Image credit:
Elizabeth Brown, founding member of BAA.
© Royal Astronomical Society/Science Photo Library

1894, May: IMPERIAL AMBITIONS
First meeting of the Joint Permanent Eclipse Committee with the Royal Society, formalising an arrangement that had begun in 1870. British astronomers travelled across the British Empire and beyond to observe solar eclipses; some of these expeditions were regarded as part of the imperial project and received state support.

Image credit:
Eclipse expedition to Shahdol, India, 1898
Robert Gossett Woodthorpe, RAS ADD MS 267/11/
© Royal Astronomical Society/Science Photo Library

1897: INSPIRING INNOVATION
The first award of the Society's Hannah Jackson (née Gwilt) Gift and Medal for developing instruments and techniques in observational astronomy, to Lewis Swift.

Image credit:
Prototype of the Jackson-Gwilt Medal
© Royal Astronomical Society

1903: HONORARY WOMEN IN ASTRONOMY & SPECTROSCOPY
Agnes Mary Clerke, historian of astronomy, and Margaret Huggins, a pioneer in astronomical spectroscopy, become the fourth and fifth women to be made Honorary Members.

Image credit:
Portrait of Agnes Clerke
© Royal Astronomical Society/Science Photo Library

1915, February: PETITION TO THE KING
Council sends petition to the King for a Supplemental Charter to enable women to be elected as Fellows and Associates.

1916, 14 January: HE AND SHE
Following the adoption of the Supplemental Charter, the first women Fellows are elected in January 1916. In February a bye-law is added to the Society's constitution stating "words denoting the masculine gender only shall include the feminine gender also." A total of twelve women become Fellows in 1916.

Image credits:
Portraits, left to right
Annie Scott Dill Maunder
Courtesy of © Cambridge Antiquarian Society
Autotype colour photograph of Francisca Herschel
RAS ADD MS 237/6
© Royal Astronomical Society/Linda Laird
Fiammetta Wilson from Knowledge Illustrated
Knowledge Illustrated, Public domain

1919, May and November: BENDING LIGHT
Frank Watson Dyson and Arthur Stanley Eddington's eclipse expeditions test Einstein's 1915 General Theory of Relativity which predicts that light going past a large mass will bend by twice as much as predicted by the well-established Newtonian theory of gravity. A joint RAS and Royal Society meeting about the observations establishes Einstein's General Relativity as the best theory of gravity.

Image credits:
Opening moments of the 29 May 1919 eclipse
1919 eclipse totality
Closing seconds of the 1919 eclipse
Negative from report published in MMRAS
All images © Royal Astronomical Society/Science Photo Library

1922, 29 May - 3 June: RAS100: TELEGRAM FROM THE KING
We celebrate our centenary, but owing to the repercussions of WW1 our celebrations are delayed until 1922.

Image credit:
Royal Astronomical Society Centenary Celebration, 1922 May 30
MNRAS, 82 (1922), plate 11
Photograph © F.A. Swaine

1922: EARTH AND SKY
The first publication of the Geophysical Supplement to Monthly Notices demonstrates the interest of Fellows in the Earth and the new field of geophysics.

Image credit:
First issue of Geophysical Supplements
© Lynda Laird/Royal Astronomical Society

1922: A LIBRARY BEQUEST
Professional soldier with interests in geodesy Colonel Edmond Grove-Hills, who is RAS President from 1913-1915, bequests his library, now the Grove-Hills Library including many historic and valuable volumes.

Image credit:
Books from the Grove-Hills library
© Royal Astronomical Society

1922: GOING INTERNATIONAL
The first General Meeting of the International Astronomical Union in Rome. Spectroscopist Alfred Fowler, RAS President 1919–1921, is the first IAU General Secretary; Astronomer Royal Frank Watson Dyson also attends.

Image credit:
IAU delegates in Rome
Popular Astronomy

1926: HOW STARS WORK
Arthur Stanley Eddington (RAS President 1921 - 1923), publishes his instant classic, "The Internal Constitution of the Stars", which will remain a bestseller for decades.

Image credit:
Albert Einstein and Arthur Eddington, Cambridge Observatory
© Royal Astronomical Society/Science Photo Library

1926: EINSTEIN GOLD
Award of Gold Medal to Albert Einstein for his work on relativity and the theory of gravitation.

Image credit:
Detail of Albert Einstein and Arthur Eddington, Cambridge Observatory
© Royal Astronomical Society/Science Photo Library

1928: SYNCHRONISED TIME
Before the coming of the railways results in synchronised clock times, local times vary from location to location across the UK. A subcommittee of Council recommends that the railway companies should adopt the 24-hour clock in their timetables. British Rail does so in 1965, reducing mistakes and misunderstandings resulting from 12-hour time codes.

Image credit:
A railway to the Sun
© Royal Astronomical Society/Science Photo Library

1931: PRIMEVAL ATOM
Eddington arranges for Belgian priest and scientist Georges Lemaître's 1927 paper on the expansion of the universe, which later will lead to the idea of the Big Bang, to be translated into English for the first time and re-published in Monthly Notices, dramatically expanding its reach.

Image credit:
Timeline of the expanding Universe
NASA/WMAP Science Team

1931: FIRST GEOPHYSICS PRESIDENT
Sydney Chapman is the first geophysicist President 1941- 43. He receives a Gold Medal in 1949 for his work on geomagnetic phenomena.

Image credits:
Presidential Portrait of Sydney Chapman
© Royal Astronomical Society/Science Photo Library
Antelope Canyon, United States
Christopher Burns/Unsplash
Colorful Clouds Of Carina
Hubble Heritage Team (AURA/STScI /NASA)

1931: EARTH'S MAGNETIC FIELD
V. C. A. Ferraro publishes the first paper describing the Earth's magnetosphere.

Image credit:
Sun's magnetic field and Earth's magnetosphere
NASA SOHO Image Gallery, Steele Hill

1934: LEADING IN EGYPT
Our Fellow Mohammed Reda Madwar becomes the first Egyptian Director of Helwan Observatory and later professor of astronomy at Cairo University. He completed his PhD in astronomy at the University of Edinburgh in 1926.

Image credit:
Front row left: Dr Madwar next to Harlow Shapley
© AIP Emilio Segrè Visual Archives, Physics Today Collection

1935, January: WHITE DWARFS
At a meeting of the Society Subrahmanyan Chandrasekhar uses quantum mechanics to predict that stars made from extremely dense matter can exist. His ideas are initially dismissed by Eddington, though accepted later.

Image credit:
White dwarf siphons material from companion star (artist's impression)
NASA/JPL-Caltech

1936: INGE LEHMANN FELLOW
Inge Lehmann, a seismologist who discovered the Earth's solid inner core, elected as a Fellow.

Image credit:
Structure of the Earth's core
Vadim Sadowski, Shutterstock

1937: GOLD FOR GEOPHYSICS
Award of Gold Medal to Harold Jeffreys (who will be knighted in 1953) for his work on the physics of the Earth and other planets, and the origin and age of the solar system.

Image credit:
Portrait of Harold Jeffreys
© Royal Astronomical Society/Science Photo Library
Paths of waves within the Earth
Lucinda Offer/Royal Astronomical Society

1943: FIRST WOMAN ON COUNCIL
Madge Adam becomes the first woman on Council. She will become a Vice President three times 1947-48, 1961-63 and 1969-70.

Image credits:
Madge Adam photographed by Deborah Elliott
© Deborah Elliott. By kind permission of the Principal and Fellows of St Hugh's College, Oxford
Madge Adam and Ida Busbridge, c.1938
By kind permission of the Principal and Fellows of St Hugh's College, Oxford

1946: ISAAC NEWTON TELESCOPE
With the Royal Society, we lobby the government for what will become the Isaac Newton 98-inch Optical Telescope (INT) in the UK. It is inaugurated in December 1967 at Herstmonceux, Sussex. The INT is moved to La Palma in the Canary Islands in 1979 where it resumes operation in 1984.

Image credits:
Isaac Newton Telescope, La Palma
Victor R. Ruiz
Attribution 2.0 Generic (CC BY 2.0)
Isaac Newton Telescope at Herstmonceux
© Royal Astronomical Society/Science Photo Library

1948: FIRST EDITOR
Flora McBain is appointed as the first dedicated editor of Monthly Notices.

Image credit:
Flora McBain at Edinburgh RAS meeting
© Edinburgh Evening Dispatch

1948, 29 October: EXPANDING DEBATE
Our first meeting outside London is in Edinburgh. A generation of debate, particularly involving Sir Fred Hoyle (President 1971-1973), follows the reading of the paper "The Steady State Theory of the Expanding Universe" by Hermann Bondi and Tommy Gold.

Image credit:
RAS meeting, Royal Observatory Edinburgh, 1948
Edinburgh Evening Dispatch
Portrait of Fred Hoyle
© Royal Astronomical Society/Science Photo Library

1949: TUNING IN TO THE UNIVERSE
We set up a Radio Astronomy Committee which supports the building of a “250-ft steerable paraboloid aerial”. An out-of-town meeting held in July in Manchester includes visits to Jodrell Bank Experimental Station, later to become the radio astronomy observatory.

Image credit:
RAS visit to Jodrell Bank, 1958

1953: FIRST EDDINGTON MEDAL
Georges Lemaître wins the first Eddington Medal for his theoretical work on the expansion of the universe.

Image credit:
Eddington Medal

1957: RISE OF THE SCIENTIST
The appointment of our last amateur President, William Herbert Steavenson 1957-1959, a medical doctor and historian of astronomy, marks the dominance of the professional scientist.

Image credit:
Portrait of William Steavenson
RAS Papers 113 Presidential Portraits

1958: INTERNATIONAL GEOPHYSICAL YEAR
A worldwide programme of data collection from July 1957 to December 1958 results in increased interest in geophysical research across the globe.

Image credits:
Replica of Sputnik 1, launched during IGY
NSSDC, NASA
CC0 1.0
Replica of Sputnik 1, launched during IGY
NASA
Berann painting of Heezen-Tharp "World ocean floor"
Library of Congress, Geography and Map Division.
[Heinrich C. Berann, Bruce C. Heezen, Marie Tharp] Library of Congress

1958: EARTHBOUND
The Geophysical Supplement to Monthly Notices expands to become the Geophysical Journal of the RAS.

Image credit:
Title page of the Geophysical Journal

1959: WORKING FOR AFRICA
Ghanaian Fellow Francis Allotey studies at Imperial College London, inspired by a leaflet featuring Eddington. Allotey became a founding fellow of the African Academy of Sciences and championed using maths, physics and computing to advance development in Africa.

Image credit:
Institute of Physics award for Francis Allotey, 2012
Institute of Physics

1960: QUARTERLY REPLACES OCCASIONAL
Quarterly Journal first published, replacing Occasional Notes, which started in 1938.

Image credit:
The first issue of Quarterly Journal RAS

1961: EARTH MOVES
Worldwide Standardized Seismograph Network established. The global network of identical high-quality seismometers allows unprecedented accuracy in location of earthquakes, following a desire to detect underground nuclear test explosions.

Image credit:
Eskdalemuir Observatory
Kevin Rae/Eskdalemuir Observatory

1968: CHECK YOUR PULSAR
An April meeting of the Society is dominated by reports of the discovery of pulsars by Jocelyn Bell Burnell (RAS President 2002-2004) and other Cambridge radio astronomers. Initially thought to be white dwarfs, pulsars are soon recognised as rotating neutron stars, transforming our understanding of how stars evolve.

Image credits:
Neutron star in the Crab Nebula
NASA, ESA

Presidential portrait of Jocelyn Bell Burnell
RAS Papers 113 Presidential Portraits

1970: RAS150
Our 150th anniversary is marked by a commemorative stamp.

Image credit:
First day cover of 150th-anniversary stamp

1973: FIRST CHAPMAN MEDAL
The first award of the Chapman Medal for Geophysics and Planetary Science goes to Drum Matthews and Fred Vine for their formulation of seafloor spreading, an essential element of plate tectonics on the surface of the Earth.

Image credit:
Fred Vine sketching the seafloor, Princeton, 1968
© Courtesy of Fred Vine

1974: FIRST HERSCHEL MEDAL
The first award of the Herschel Medal – for investigations of outstanding merit in observational astrophysics – to Australian Paul Wild for solar radio astronomy.

Image credit:
VLA radio image of the Sun, 1981
Image courtesy of NRAO/AUI CC BY 3.0

1974: A NOBEL PRIZE FOR ASTRONOMY
For the first time, the Nobel Prize in Physics goes to observational astronomers: Gold Medal 1964 recipient Sir Martin Ryle and Eddington Medal 1969 recipient Antony Hewish.

Image credit:
Antony Hewish and Martin Ryle
© AIP Emilio Segrè Visual Archives, Physics Today Collection

1987: THE GREAT ATTRACTOR
The Milky Way and its surrounding galaxies are found to be moving under gravity towards a region of space later named the Great Attractor. All are now considered part of the Laniakea supercluster. The team includes Sandra Faber (Gold Medal 2020) Donald Lynden-Bell (Gold Medal 1993) and Roger Davies (RAS President 2010-2012).

Image credits:
Flow of galaxies in Laniakea
Claus Lunau/Science Photo Library
Portraits, from left to right:
Donald Lynden Bell
© Royal Astronomical Society/Science Photo Library
Roger Davies
© University of Oxford Department of Physics
Sandra Faber
Steve Kurtz
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1992: A FIRST AT DURHAM
First National Astronomy Meeting is held at Durham University, bringing the whole UK astronomical community together.

1994: CAROLE JORDAN, PRESIDENT
Solar physicist Carole Jordan is the first woman President (1994 - 1996).

Image credit:
The active Sun in ultraviolet light
Solar Dynamics Observatory NASA
Courtesy of NASA/SDO and the AIA, EVE, and HMI science teams
Portrait of Carole Jordan
© Royal Astronomical Society/Science Photo Library

1995: EXTRAORDINARY EXOPLANETS
Using a state-of-the-art spectrometer Michel Mayor and Didier Queloz pick up cyclic movements of the star 51 Pegasi indicating an orbiting planet - the first exoplanet around a normal star. Michel Mayor was awarded the Gold Medal in 2015 for his leadership in the field of exoplanets and in 2019 Mayor and Queloz received the Nobel Prize in Physics for this discovery.

Image credit:
Artist's impression of the exoplanet 51 Pegasi b
ESO/M. Kornmesser/Nick Risinger

1996: RUBIN'S DARK MATTER
Vera Rubin wins the Gold Medal after she provides strong evidence for the existence of dark matter through her observations of the rotations and large-scale movements of galaxies.

Image credits:
Model galaxy with dark matter halo
Aquarius Project, Volker Springel, Max-Planck-Institute for Astrophysics
Spiral galaxy UGC 2885, also known as "Rubin's galaxy," after Vera Rubin, who studied the galaxy's rotation rate.
NASA, ESA, and B. Holwerda (University of Louisville)
Portrait of Vera Rubin
AIP Emilio Segrè Visual Archives, AIP Gallery of Member Society Presidents
© AIP Emilio Segrè Visual Archives

1997: ASTRONOMY & GEOPHYSICS
The Quarterly Journal, our house magazine, receives a new look and a new name that describes just what we do.

Image credit:
Cover of the first issue of A&G
© Royal Astronomical Society

2005: SATURN'S MOON LANDING
Titan is the target for the first landing on a moon of another planet. The European Space Agency's Huygens probe lands on Titan, finding an icy surface with lakes of methane fed by hydrocarbon rain. John Zarnecki (RAS President 2016–2018) leads the Huygens Surface Science Package and receives the Gold Medal in 2014 for his long and distinguished service to ESA and the UK Space Agency.

Image credit:
The Lake District – of Titan
NASA/JPL-Caltech/ASI/USGS
NASA

2006: ICY PLUMES
The Magnetometer Team on NASA's Cassini mission led by Michele Dougherty (Gold Medal 2017 for space physics), trace an anomaly in Saturn's magnetic field to its moon, Enceladus, where icy plumes of water are discovered erupting from its surface.

Image credit:
Icy plume from Enceladus, moon of Saturn
NASA/JPL/Space Science Institute
NASA

2008: KAVLI PRIZE FOR ASTROPHYSICS
Donald Lynden-Bell (President of the RAS 1985-87 and Gold Medal 1993) and Maarten Schmidt, (Gold Medal 1980) share the first Kavli Prize for Astrophysics for their work on quasars.

Image credit:
Kavli Prize for Schmidt and Lynden-Bell
Photographer, Maarten Schmidt, Donald Lynden-Bell and HRH Crown Prince Haakon
© Håkon Mosvold Larsen/SCANPIX

2009: LAUNCHING SCIENCE
The launch of ESA's Herschel and Planck space observatories with David Southwood (RAS President 2012-2014) as Director of Science at ESA.

Image credit:
ESA's Ariane V launches Herschel and Planck
ESA-CNES-Arianespace/Photo Optique Video CSG

2010: STAR INVESTMENTS
The RAS launches a Fellowship scheme to fund outstanding early career researchers, adding to the Norman Lockyer Fellowship that started in 1992.

Image credit:
Norman Lockyer Fellow Vinesh Maguire-Rajpaul
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2014: RAS200: SKY & EARTH
We start to celebrate our bicentenary with the £1 million collaborative outreach projects together called RAS200, bringing engagement with astronomy and geophysics to new and broader audiences.

Image credit:
Astronaut 'Zero-G' training with Bounce Back.
© Lynda Laird/Royal Astronomical Society

2015: LOVELY SPACE WEATHER?
RAS evidence to the House of Commons Science and Technology Committee on the risks of adverse space weather results in a UK government strategy for space weather (after this concern had been added to the risk register in 2011).

Image credit:
Space weather affects our technological society
ESA - P. Carrill

2016: GENDER BALANCING
We celebrate 100 years of women Fellows.

2016: 4000+
The number of RAS members exceeds 4000!

2016, February: RIPPLES IN SPACE TIME
A meeting of the Society on 12th February celebrates the first detection by the international LIGO consortium of a completely new form of astronomical information: gravitational waves

Image credits:
Big bangs: merging black holes detected
SXS, the Simulating eXtreme Spacetimes (SXS) project
Ripples in spacetime
LIGO/T. Pyle
Merging neutron stars make gravitational waves
Courtesy NSF/LIGO/Sonoma State University/A. Simonnet

2020: 200 YEARS YOUNG
We celebrate our 200th birthday, looking back at our heritage and forward to new discoveries with Astronomer Royal Martin Rees. A set of stamps commemorates the year, along with a new logo, and our major outreach project RAS200.

Image credits:
Pulsars are rapidly rotating neutron stars
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RAS200 visit to Royal Observatory Greenwich
© Lynda Laird/Royal Astronomical Society
Our new logo.
© Royal Astronomical Society

2020: X-RAYING THE UNIVERSE
Andrew Fabian (RAS President 2008–2010) wins the Kavli Prize for Astrophysics for his work using X-rays to understand how the supermassive black holes at the centres of galaxies interact with stars and gas around them.

Image credit:
Artist's impression of outflows from a supermassive black hole
ESO/M. Kornmesser

#RAStimeline