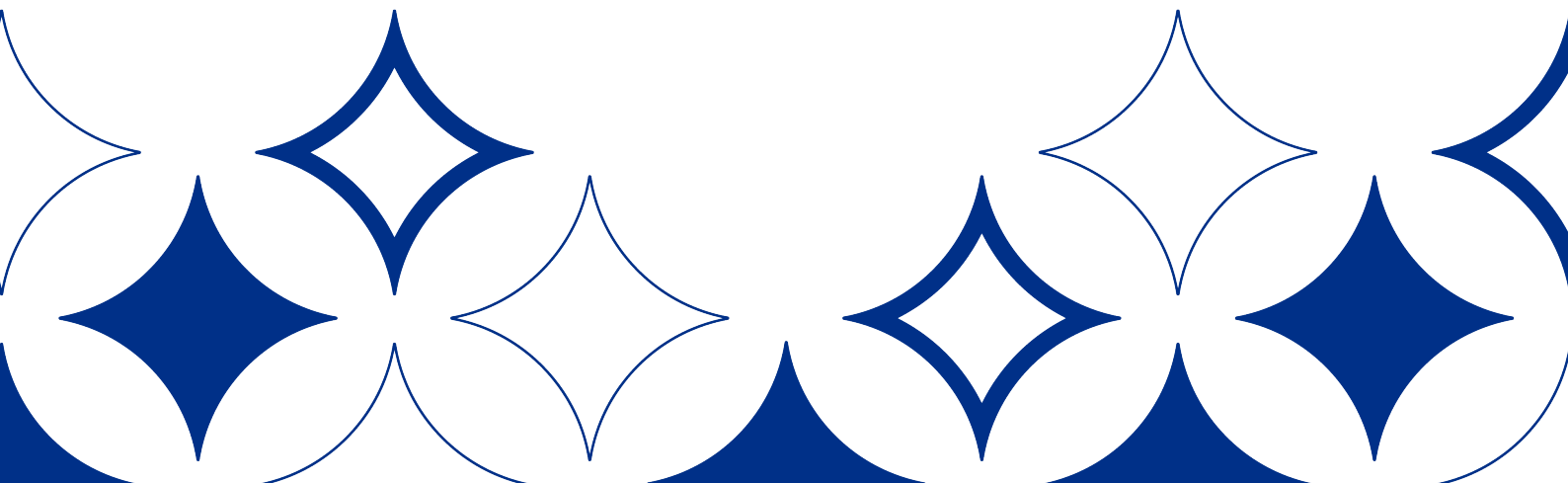


# 19th Appleton Space Conference

Speaker biographies



# Session 1: Resilient Society

## Dr Sarah Beardsley

Sarah became Director of RAL Space in 2022 and leads around 330 expert staff to deliver science and technology programmes for the UK space sector. From 2014 she served as the Head of the Space Engineering and Technology Division, overseeing the engineers, technicians and project managers underpinning many of the hardware projects in RAL Space. She is passionate about early careers development and is a Fellow of the Royal Astronomical Society, a Chartered Physicist and Member of the Association of Project Management.

## Rebecca Evernden

Rebecca is the first Director for Space at the Department for Science, Innovation and Technology. Her responsibilities include developing the first National Space Strategy, establishing a new space policy and strategy hub in close partnership with the Ministry of Defence, sponsoring the work of the UK Space Agency and overseeing several of the Government's major space programmes.

## Chris White-Horne

Chris and his colleague Annelies Look job share the Deputy CEO role at the UK Space Agency. They are responsible for the delivery of all the UK Space Agency's major programmes, from space science, exploration and Earth observation missions, to enabling satellite launch from UK spaceports and improving space sustainability. Annelies and Chris joined the UK Space Agency in 2023, having previously been the Senior Responsible Owner for the Rail Transformation Programme in the Department for Transport.

## Prof Richard Harrison MBE

Richard is an established solar physicist, with over three decades' experience in the study of solar activity and solar ejecta. He is Chief Scientist at RAL Space and has been Principal Investigator of key science instruments aboard the ESA SOHO and the NASA STEREO spacecraft and co-investigator of numerous space instruments. He is author of over 200 research papers in the professional literature. He was awarded the MBE and Royal Astronomical Society Chapman medal, both in 2004. He is an Honorary Professor at the Universities of St Andrews, Aberystwyth and Imperial College London and Fellow of the Institute of Physics and of the Royal Astronomical Society.

## Dr Sonali Mohapatra

Sonali is a Quantum Innovation Sector Lead at the National Quantum Computing Centre, leading the identification of use-cases and the development of quantum computing applications across various sectors such as Space, Healthcare, AI, Financial Services, Energy, transport etc, to deliver quantum readiness for the UK.

# Session 2: Earth Observation

## Dr Jane Hurley

As Head of the Earth Observation and Atmospheric Science Division, Jane is responsible for about 85 staff, in 5 diverse groups, covering technology development, provision of facilities, scientific research and data. Prior to joining RAL Space in 2013, she has worked on instrument design and development, science and operations on the ESA Cassini mission and validation on the Rosetta mission, and was instrument scientist on the UK-provided microseismometer on NASA's InSight mission to Mars.

## Prof Christine Gommenginger

Christine has over 25 years' experience in ocean remote sensing and physical oceanography. Her research explores how microwave electromagnetic signals interact with the ocean to develop new and improved satellite-based ocean measurements, products, applications, services, sensors and missions. Her pioneering work led to new spaceborne observations of ocean wave period, coastal sea level and wave height, ocean winds and total surface currents in the open ocean and the coastal zone.

## Dr Stuart Clark

Stuart runs Expanded Universe Ltd. He is a highly experienced journalist with a PhD in astrophysics. From the news rooms of the Guardian to the press offices of the European Space Agency, he has more than 30 years' experience of working at the forefront of science and technology communication. In September 2020, he was awarded a higher doctorate from the University of Hertfordshire for "services to astronomy and the public understanding of science".

## Dr Simon Keogh

Simon is the head of the Met Office's Space Applications and Nowcasting R&D area, which aims to improve the capability of the organisation to know what is happening now in our environment and to know how the situation is likely to evolve in the very short term. Simon has worked on a wide range of observing problems to improve our atmosphere and ocean forecasting capabilities, including the exploitation of EUMETSAT's satellite missions and the development of ground-based observing technologies. Simon is Chair of EUMETSAT's Operations Working Group, which monitors and steers the development of EUMETSAT's operational services.

# Session 3: Keynote

## Prof Dame Jane Francis

Jane is Director of the British Antarctic Survey, a research centre of the UK Natural Environment Research Council. She is involved with international polar organisations, such as the Antarctic Treaty and European Polar Board, and on several advisory boards of national polar programmes.

Jane Francis is a geologist by training, with research interests in past climate change. She has undertaken research projects at the universities of Southampton, London, Leeds and Adelaide, using fossils to determine the change from greenhouse to icehouse climates in the polar regions over the past 100 million years. She has undertaken over 15 scientific expeditions to the Arctic and Antarctica in search of fossil forests and information about climates of the past.

Jane was appointed Dame Commander of the Order of St Michael and St George (DCMG) in recognition of services to UK polar science and diplomacy. She was also awarded the UK Polar Medal by H.M The Queen, the Royal Geographical Society's Patrons Medal and the 2022 Prince Albert II of Monaco Foundation Award for Planetary Health. Jane is Chancellor of the University of Leeds and a Fellow of the Royal Society.

# Session 4: People, communication, and skills

## Prof Anu Ojha OBE

Anu is the Director of Championing Space at the UK Space Agency, responsible for overseeing the Agency's inspiration and outreach activities, its international relationships and ESA policy teams, and leading on how we engage with audiences on the growing importance of space. Anu has worked in roles within a range of space and science organisations, including as a Director of the UK National Space Centre, a member of STFC Council and a member of the European Space Agency Human Spaceflight and Exploration Science Advisory Committee (HESAC).

## Dr Alex Brown

Alex manages all aspects of the programmes in the European Space Education Resource Office (UK), running impactful student enrichment activities, teacher training for schools to teach the curriculum using the context of space topics, and partnerships to support students exploring opportunities for a future in STEM.

## Helen Johnson

Helen is the head of the STFC Skills Centre. Helen was the Head of Apprenticeships for STFC and has a passion for ensuring all apprentices are given opportunities to fulfil their potential. Now taking on the role of spearheading the Skills Centre, she's using her 15 years of experience in education and skills in both the public and private sector to strive to strengthen the apprentice and early careers offerings.

## CJ Bishop

CJ is the Community Engagement Manager for the National Space Centre and is enjoying working in the science engagement sector to make STEM and space accessible for his local audiences in support of a national vision. With a decade worth of experience, he is an advocate for taking a person-centred approach and working with individuals over a period of multiple interactions to best enhance positive outcomes and impact in his work.

## **Group Captain John Hetherington**

John is the Deputy Head Space Enablement, UK Space Command where he has responsibility for RAF Fylingdales, workforce, training, cyber, engineering, safety and through-life capability management. John has a Masters in Defence Studies from Kings College London, is a Chartered Member of the Institute of Personnel and Development and a Fellow of CMI. He has been deployed on various operations; Op RESONATE in Saudi Arabia, Op TELIC in Iraq and he served in Afghanistan on Op HERRICK

## **Mansi Joshi**

Mansi is an Aerothermal Engineer at Rolls-Royce. She was a student of the National Space Academy and attended Loughborough university.

## **NSTF Highlight**

### **Prof Mark Thomson**

Professor Mark Thomson is Executive Chair of STFC. He is Professor of Experimental Particle Physics at the University of Cambridge, and is an author on over 1,000 publications. In one of his many international leadership roles, he has been the co-leader of the Deep Underground Neutrino Experiment (DUNE), a collaboration of over 1000 scientists. Beyond his own research, Mark has held numerous research oversight roles in the UK and abroad. He has worked closely with STFC in various capacities, including chairing its main peer review body.

# Session 5: Space science and exploration

## Paul Eccleston

Paul has been Chief Engineer for RAL Space since 2016. He is also the manager for the Ariel Mission Consortium, a group of more than 60 institutes across 19 countries in Europe and North America. Paul has played a leading role in a number of science instruments including as engineering manager for the Spectral Investigation of the Coronal Environment instrument for Solar Orbiter from 2012 until 2015. Paul worked in a variety of roles on the Mid-InfraRed Instrument for the Webb Telescope. In this role Paul coordinated the work of the consortium of 40+ institutes in 11 countries to build, test and calibrate the instrument.

## Prof Neil Bowles

Neil is a planetary scientist in the Department of Physics at the University of Oxford. He is also the academic chair of Space at Oxford. His main research interests are in laboratory measurements that help analyse and interpret data returned from space-based remote sensing and in-situ instruments for landers. He also works on developing new space-based instrumentation to study objects as diverse as the surfaces of asteroids, the icy satellites of the outer planets and the Moon and look for trace gases of biological interest in the atmosphere of Mars.

## Prof Adam Amara

Adam received his PhD from the Institute of Astronomy at the University of Cambridge in 2005. After this, he began a postdoc which led to the submission of the DUNE concept to the French Space Agency. This later evolved into ESA's Euclid Space Mission. Now he is the head of Mathematics and Physics at the University of Surrey.

## Dr Kevin Croker

Kevin is a theoretical physicist in the Department of Physics and Astronomy at the University of Hawai'i at Manoa. Prior to graduate training in physics, he received an undergraduate degree in Computer Science at Washington University in St. Louis. He is a Fulbright program alumnus and currently holds an Affiliate Faculty appointment at the University of Hawai'i at Manoa.

# Session 6: Community

## Charlie Haire

Charlie is Head of Business Development at RAL Space, working with industry, academia, and Government to develop new opportunities for the UK's National Space Laboratory. He previously worked at the UK Space Agency, leading strategic relationships across the Indo-Pacific and the Middle East. Previous to space Charlie worked in the renewable energy and environmental sectors and holds a master's degree in Manufacturing Engineering.

## John Abbott

John Abbott is the new CEO of the Satellite Applications Catapult. He joined the Catapult from the Real Estate Registry in Saudi Arabia, where he was Chief Digital Officer. John was instrumental in the delivery of the Kingdom's first ever registry of land ownership as part of a public-private partnership supported by the Public Investment Fund. John was previously Director of Digital Data and Technology and a member of the Executive Board at HM Land Registry, and Head of Digital Products at Ordnance Survey.

## Kaoutar Abousmir

Kaoutar is a career civil servant and strategy professional currently heading the International Space Strategy team of the UK Department for Science Innovation and Technology. Her current areas of responsibility cover civil space policy and includes providing leadership on the UK strategic approach to international collaboration on space. This includes overseeing implementation of the international commitments in the National Space Strategy, working closely with other government departments.

## John E Ward

John is the Senior Director of Research and Development at Spire Global. With over 15 years experience in the space sector in both academia and private industry he has been involved in launching two scientific stratospheric balloon experiments, two commercial nanosatellites and driving commercial contract deliverables for launcher and satellite avionics systems.