



United Nations
Office for Outer Space Affairs

SKAO

UN / SKAO WORKSHOP ON DARK AND QUIET SKIES FOR SCIENCE AND SOCIETY 2025

9th - 11th December 2025
United Nations Office Vienna



Biographies Booklet

DAY 1

Welcome remarks

Aarti HOLLA-MAINI

Director, United Nations Office for Outer Space Affairs (UNOOSA) – Austria

Ms. Aarti Holla-Maini leads UNOOSA, guiding its strategic direction and ensuring alignment with UN mandates. She advises the Secretary-General on space affairs and oversees implementation of treaties and policies. Her work promotes peaceful space exploration, transparency, and sustainability, advancing UNOOSA's role in global space governance and international cooperation.

Philip DIAMOND

Director-General, SKAO – United Kingdom

Prof. Philip Diamond has led the Square Kilometre Array Observatory (SKAO) since 2012, overseeing the development of world-class radio telescopes in South Africa and Australia. With a distinguished international career, he was awarded a CBE in 2024 for services to radio astronomy. His leadership ensures SKAO's long-term impact on global astronomical research.

Status of the Dark and Quiet Skies initiative

Nathalie RICARD

Scientific Affairs Officer, United Nations Office for Outer Space Affairs (UNOOSA) – Austria

Nathalie Ricard is an aerospace engineer and scientific affairs officer at the United Nations Office for Outer Space Affairs. Previously, she managed satellite communication and navigation activities at Deutsche Telekom, the European Space Agency, and the European Union Agency for the Space Programme.

Federico DI VRUNO

Spectrum Manager, SKA Observatory – UK

Federico Di Vruno manages spectrum use at SKAO and serves as Associate Director of the IAU Centre for the Protection of the Dark and Quiet Sky. With a background in electromagnetic compatibility for spacecraft, he leads studies and regulatory work on satellite constellations and radio astronomy, representing SKAO at ITU and UN COPUOS.

Keynote International Astronomical Union

Willy BENZ

President, International Astronomical Union (IAU) – Switzerland

Prof. Willy Benz is an astronomer and former Director of the University of Bern's Physics Institute. He led the Swiss research centre PlanetS and was Principal Investigator of ESA's CHEOPS mission. With a career spanning Europe and the U.S., he now serves as IAU President, promoting global collaboration in planetary science.

Keynote International Telecommunication Union

Mario MANIEWICZ

Director, Radiocommunication Bureau, ITU – Switzerland

Mr. Mario Maniewicz leads the ITU Radiocommunication Bureau, managing global spectrum and satellite orbit coordination. With over 35 years at ITU, he has held senior roles across sectors and regions. An engineer by training, he promotes efficient spectrum use and international cooperation in radiocommunications, supporting equitable access to space resources.

Session 1 - Impact assessment after 3 years of observations

Piero BENVENUTI (Chair)

Director, IAU Centre for the Protection of Dark and Quiet Skies – Italy

Prof. Piero Benvenuti is Professor Emeritus of Astrophysics at the University of Padua and Director of the IAU CPS. He has held leadership roles at ESA, INAF, and ASI, and served as IAU Secretary General. His career bridges science and society, including a decade as consultant to the Pontifical Council for Culture.

- Meredith RAWLS

Research Scientist, University of Washington – United States

Meredith Rawls works on data pipelines for the Vera C. Rubin Observatory's Legacy Survey of Space and Time. Her research focuses on satellite impacts on astronomy and sky visibility. She co-leads SatHub at the IAU Centre for the Protection of the Dark and Quiet Sky, advancing mitigation strategies and awareness.

- **CUI Chenzhou**

Deputy Director, National Astronomical Data Center – China

Prof. Chenzhou Cui is a leading expert in Virtual Observatory and Astroinformatics with over 20 years of experience. He serves as Deputy Director of China's National Astronomical Data Center and actively contributes to global dark and quiet sky efforts. He is a past president of IVOA and IAU Commission on Data and Documents.

- **Gregory HELLBOURG**

Staff Scientist, California Institute of Technology – United States

Gregory Hellbourg is a Staff Scientist at Caltech and Spectrum Manager for Owens Valley Radio Observatory. He leads spectrum protection for the DSA-2000 and develops RFI mitigation strategies. Active in global spectrum policy, he contributes to IUCAF, ITU, and training programs, advancing coexistence between radio astronomy and commercial wireless systems.

- **Ammar Eissa Mohammed ABDULLA**

Director, Astronomical Observatories Department, SAASST – UAE

Ammar Abdulla directs observatory development at SAASST, University of Sharjah, leading UAE's satellite-tracking and dark-sky initiatives. He collaborates with global experts to build observatory infrastructure and advocates for night-sky protection. His work integrates research, outreach, and sustainability, positioning Sharjah as a regional hub for astronomy and space situational awareness.

Session 2 - Status of astronomers mitigation actions

Beatrice KIOKO (Chair)

Institutional Affairs Officer, European Organisation for Astronomical Research in the Southern Hemisphere (ESO) – Germany

Beatrice Kioko supports international collaboration at ESO through legal, policy, and governance engagement. With a background in international law and multilateral governance, she focuses on frameworks for sustainable scientific infrastructure. Her work promotes dark and quiet sky protection, equitable research access, and inclusive science diplomacy across Europe and Africa.

- **Constance WALKER**

Astronomer, NSF NOIRLab – United States

Connie Walker leads dark sky protection efforts through NOIRLab, IAU, and DarkSky International. She heads the Globe at Night program and co-chaired major conferences on satellite constellations and light pollution. Her work spans citizen science, observatory site protection, and international policy, including certifying the Gabriela Mistral Dark Sky Sanctuary.

- **Olivier HAINAUT**

Astronomer, European Organisation for Astronomical Research in the Southern Hemisphere (ESO) – Germany

Olivier Hainaut researches minor bodies in the Solar System, including comets and asteroids, and the impact of satellite constellations on astronomy. With extensive experience in observatory operations and large telescopes, his work supports scientific resilience amid growing challenges to ground-based observations.

- **Erick MEZA QUISPE**

Researcher, Peruvian Space Agency – CONIDA - Peru

Dr. Erick Meza leads the Moquegua Astronomical Observatory at CONIDA, specializing in stellar occultations and dark sky protection. He has contributed to site testing projects across Peru and promotes astronomy outreach and research. His work supports the development of Peru's astronomical infrastructure and raises awareness of the importance of preserving observational environments.

- **Nicolas CERARDI**

Postdoctoral Researcher, EPFL – Switzerland

Dr. Nicolas Cerardi is a postdoctoral researcher in the Radio Cosmology group at Ecole Polytechnique Fédérale de Lausanne (EPFL). He earned his PhD from Paris-Cité University and specializes in radio astronomy, cosmology, and machine learning. His interdisciplinary work contributes to understanding the universe's structure and advancing data-driven approaches in astrophysical research.

- **Federico Javier DI VRUNO**

Bio previously listed on Status of the Dark and Quiet Skies initiative.

Panel 1 - Keeping a balance to preserve social and cultural use of dark and quiet skies

Jessica HEIM (Moderator)

Adjunct Research Fellow, University of Southern Queensland; Co-leader, IAU CPS – Australia

Jessica Heim researches the space sector's impact on astronomy and the environment, with a focus on dark skies, ethics, and policy. She co-leads the IAU CPS Community Engagement Hub and serves on the AAS COMPASSE committee. Her work bridges cultural astronomy, public engagement, and sustainable space development.

- **Shea ESTERLING**

Senior Lecturer, University of Canterbury – New Zealand

Shea Esterling teaches international cultural heritage law, human rights, and indigenous rights. She chairs the Cultural Heritage and the Arts Interest Group and leads a Borrin Foundation project on dark skies and indigenous knowledge. Her recent book explores restitution and rights in international law, with a focus on indigenous women's heritage.

- **Joyful MDHLULI**

Flagship Coordinator, IAU Office of Astronomy for Development – South Africa

Dr. Joyful Mdhuli coordinates flagship projects at the IAU Office of Astronomy for Development, using astronomy to drive social impact. She promotes science communication across Africa, serves on AfAS and WIPiSA committees, and edits key publications. Her work champions inclusion, innovation, and astronomy's role in sustainable development and community empowerment.

- **Antonia WIBOWO**

Researcher, National Research and Innovation Agency (BRIN) - Indonesia

Antonia Wibowo is a researcher at BRIN, focusing on literature, culture, and indigenous knowledge. With degrees in English Literature and International Relations, her interdisciplinary work explores cultural astronomy and the impact of modern technology on indigenous communities. She studies literature's intersection with politics, ethics, and philosophy, contributing to cultural preservation and inclusive scientific discourse.

- **Songphon MUNKONGSUJARIT**

Manager – Technology and Innovation Management, NARIT - Thailand

Dr. Songphon Munkongsujarit oversees technology and innovation at National Astronomical Research Institute of Thailand (NARIT), translating astronomical research into industrial applications. With a PhD in Engineering and Technology Management, he has held advisory roles at NSTDA and Thailand's Ministry of Higher Education. He fosters global collaborations to enhance science's societal impact and supports strategic partnerships for Thailand's space sector.

- **Anubhav PRAKASH**

Manager – Government Relations, Space Industry Association – India

Anubhav Prakash is a seasoned government relations expert with over 15 years in India's satellite and telecom sectors. At SIA-India, he leads strategic initiatives that shape national policy and regulation. Known for building strong alliances with key stakeholders, he advocates for satellite communication's transformative potential. His insights into legislative developments and regulatory strategy have significantly advanced India's space industry.

Pitch speakers

- **Ericsson LÓPEZ IZURIETA**

Director, Quito Astronomical Observatory – Ecuador

Dr. Ericson López is Director of the Quito Astronomical Observatory and professor at Escuela Politécnica Nacional. His research spans compact objects, relativistic astrophysics, and space weather. He earned his PhD in Russia and has modernized Ecuador's observatory infrastructure, advancing regional capabilities in solar-terrestrial interaction and radio astronomy.

- **Biruk ABTE**

Associate Researcher, Space Science and Geospatial Institute – Ethiopia

Biruk Abte is an observational astronomer at Ethiopia's Space Science and Geospatial Institute. He works on telescope operations, data analysis, and amateur telescope building. He is revitalizing the Entoto Observatory's 1-meter telescopes and promotes astronomy education through outreach and planetarium programs, fostering inclusive engagement and collaboration across the African astronomy community.

- **Narae HWANG**

Astronomer, Korea Astronomy and Space Science Institute (KASI) – Republic of Korea

Dr. Narae Hwang represents Korea in major international observatory collaborations, including Gemini and Rubin. He advocates for dark and quiet sky protection as part of the IAU CPS Policy Hub and Korea's UN COPUOS delegation. He also advises national agencies and promotes public awareness of the value of ground-based astronomy.

- **Sarah THIELE**

Doctoral Student, Princeton University – United States

Sarah Thiele research satellite and asteroid tracking to assess impacts on the night sky and planetary defence. As a junior fellow at the Outer Space Institute, she studies orbital sustainability and debris events. She also contributed to national policy analysis on dark sky protection through the IAU CPS Policy Hub.

- **Stanislav KARPIKOV**

Core Contributor, StealthTransit – Germany

Stanislav Karpikov develops embedded systems for aerospace, automotive, and IoT applications, specializing in image processing and machine vision. He contributes to StealthTransit, a satellite mitigation system for astronomy. His work connects space technology and open-source software, promoting interdisciplinary collaboration for sustainable sky monitoring.

- **Nacera BEKHADDA**

Research Fellow, Algerian Space Agency - Algeria

Dr. Nacera Bekhadda holds a PhD in Control Science and Engineering and is a researcher on guidance, navigation, and control systems at the Algerian Space Agency. Her work focuses on orbital transfer optimization, nanosatellite attitude control, and multi-agent systems. She leads the development of a satellite collision risk assessment tool, integrating intelligent algorithms to enhance space safety and autonomy.

- **Vachik KHACHATRYAN**

President, Space42 – Armenia

Dr. Vachik Khachatryan is Technical Lead at Geocosmos and President of Space42. With a PhD in Experimental Nuclear Physics, he has worked at Yerevan Physics Institute and Jefferson Lab. His expertise spans machine learning, data science, and space systems, contributing to Armenia's growing space technology ecosystem and international scientific collaborations.

- **Ruskin HARTLEY**

CEO, DarkSky International – United States of America

Ruskin Hartley leads global efforts to protect night skies through sustainable lighting advocacy. With over two decades in environmental conservation, he has worked with communities and policymakers worldwide. His leadership spans Fair Trade USA, Heal the Bay, and Save the Redwoods League, rooted in a lifelong passion for nature.

DAY 2

Keynote satellite constellations

Patricia COOPER

Founder, Constellation Advisory, LLC – United States

Patricia Cooper advises global satellite ventures through her consultancy company, Constellation Advisory. She previously led Government Affairs for SpaceX's Starlink, securing FCC approval for 12,000 satellites. Her career spans leadership at Intelsat, the Satellite Industry Association, and U.S. federal agencies, where she shaped policy on spectrum, export controls, and space safety.

Session 3 - Satellite constellation projects overview

Natalia VICENTE (Chair)

VP of Public Affairs, GSOA – Belgium

Natalia Vicente drives advocacy for the satellite communications sector as VP of Public Affairs at GSOA, focusing on bridging digital, education, and health divides through connectivity. With over a decade in public policy and international partnerships, she previously worked at Telefonica, Telecom Italia, and Connect Europe. Natalia is a qualified lawyer with an LLM and an MBA.

- ZHANG Bo on behalf of XU Yanbin

Director General, Spectrum and Orbit Resources Center, China Satellite Network Group – China

Mr. XU Yanbin leads China's satellite spectrum and orbit management, with 30 years in satellite communications. He has directed major satellite projects and ITU-R activities, including WRC-23 preparations. Holding degrees in Astronomy and Information Engineering, he champions sustainable spectrum use and contributed to key international resolutions on orbital resource governance.

- Ilsa MROZ

Regulatory Affairs Manager, Planet Labs PBC – United States

Ilsa Mroz advances space policy and licensing across global regulatory bodies. She supports remote sensing, debris mitigation, and sustainable operations for Planet's satellite constellations. With prior leadership at the Aerospace Industries Association, she fosters international collaboration and holds degrees in global security and political science.

- **Thibaut MAURY MICOLIER**

Policy Officer, European Commission – Belgium

Thibaut Maury works on space sustainability within the IRIS² programme at DG DEFIS. Previously at the Joint Research Centre, he specialized in life cycle assessment and circularity analysis for Green Deal initiatives. He holds a PhD on the environmental impact of space activities and advocates for sustainable practices in space systems and debris mitigation.

Session 4 - Role of academia and governmental organisations to foster mitigation actions

Jessica DEMPSEY (Chair)

Director, ASTRON – Netherlands

Prof. Jessica Dempsey is a renowned radio astronomer and science leader, currently heading the Netherlands Institute for Radio Astronomy (ASTRON) and appointed as the next Director-General of SKAO. A member of the Event Horizon Telescope team, she specializes in submillimeter instrumentation and data-intensive science. She advocates for equity and ethics in STEM, inspiring future generations through inclusive leadership.

- **Jan SIMINSKI**

Technical Officer, ESA Space Debris Office – Germany

Jan Siminski is a Technical Officer at ESA's Space Debris Office, where he supports the Space Safety Programme and national debris observation projects. His work includes designing observation systems, developing data processing chains, and estimating satellite attitude and brightness to improve space situational awareness and debris mitigation strategies.

- **Astha**

PhD Researcher, University of Surrey – United Kingdom

Astha is a PhD researcher in Physics at the University of Surrey, studying dwarf galaxy formation and chemical enrichment. Concerned about satellite light pollution, she collaborates with Surrey NanoSystems to test ultra-black coatings for satellites. Her work, featured by BBC and Space.com, shows promising results in reducing satellite brightness. She actively promotes sustainable practices in astronomy and engages in outreach to protect the natural night sky.

- **Funmilola OLUWAFEMI**

Chief Scientific Officer, NASRDA - Nigeria

Dr. Funmilola Oluwafemi is a leading expert in microgravity research at National Space Research and Development Agency (NASRDA). With a PhD in space-biochemistry, she contributes to NASA's GeneLab and founded the Funafo Foundation to promote space life sciences and climate-smart

agriculture. A TWAS Young Affiliate and Karman Pioneer 2025, she has received multiple international awards and authored over 80 scientific publications. Her work advances space biology and sustainable development in Africa.

- **Roohi DALAL**

Deputy Director of Public Policy, American Astronomical Society – United States

Roohi Dalal is Deputy Director of Public Policy at the American Astronomical Society, leading initiatives on dark and quiet skies. She liaises with federal agencies, Congress, and industry to shape mitigation strategies. An observational astronomer, she earned her PhD in Astrophysics from Princeton in 2024, blending science and policy advocacy.

Panel 2 - Satellite industry mitigation: who tried what?

Patricia Cooper (Moderator)

Bio previously listed on Keynote satellite constellations.

- **Enrique ALLONA PEREZ**

Aerospace Engineer, Eutelsat Group – France

Enrique Allona is an Aerospace Engineer at Eutelsat Group, specializing in Flight Dynamics and astrophysics. He co-chairs the IAU CPS Focus Group on Dark and Quiet Skies and presented mitigation strategies at UN COPUOS STSC 2025. He also contributes to ESA's Zero Debris Technical Booklet, focusing on atmospheric impacts and satellite sustainability.

- **Josef KOLLER**

Head of Space Safety and Sustainability, Amazon Leo – USA

Dr. Josef Koller leads space safety and sustainability efforts for Amazon Leo, a satellite network providing global broadband access from Low Earth Orbit. With over 25 years in space science, policy, and strategy, he has authored 50+ publications and serves on the editorial board of Journal of Space Safety Engineering. He holds a PhD in Astrophysics from Rice University.

- **Ray SEDWICK**

Chief Scientist, AST SpaceMobile – USA

Dr. Ray Sedwick is Professor of Aerospace Engineering at the University of Maryland and Chief Scientist for Space Systems at AST SpaceMobile. He coordinates with NASA and NSF on flight safety and astronomy impact mitigation for satellite constellations. Formerly Director of UMD's Orbital Debris Center, he holds aerospace degrees from Penn State and MIT.

- **David GOLDSTEIN**

Principal Satellite Policy Engineer, SpaceX – USA

David Goldstein leads SpaceX's efforts on collision avoidance, space safety, and sustainability, coordinating with U.S. agencies and international partners. A retired U.S. Air Force Colonel, he served over 27 years in technical leadership roles, including Director of the Space Vehicles Directorate. He holds a B.S. from the U.S. Air Force Academy.

Session 5 - Interactions astronomers/industry: lessons learnt

Mamatha MAHESHWARAPPA (Chair)

Head of Research & Development, UK Space Agency – UK

Mamatha Maheshwarappa directs Research and Development within the Office of the Chief Engineer at the UK Space Agency, providing technical evidence and thought leadership at national and international forums. She serves on the Steering Committee for Dark and Quiet Skies and leads UK-funded initiatives to advance research and policy for protecting the night sky.

- **Tebogo MASHILE**

Acting Director – Astronomy Management Authority, DSTI - South Africa

Tebogo Mashile holds an MSc in Astrophysics and is pursuing a second Master's in Public Policy. As Acting Director at South Africa's Department of Science Technology and Innovation, she oversees the implementation of the Astronomy Geographic Advantage Act, protecting strategic astronomy sites. She also participates in ITU-R Working Party 7D, focusing on radio astronomy protection. Her work bridges science and policy to safeguard South Africa's astronomical heritage.

- **Siegfried EGGL**

Assistant Professor, University of Illinois Urbana-Champaign – United States

Dr. Siegfried Eggl leads the APEX group at UIUC, researching astrodynamics, planetary defence, and space situational awareness. He co-leads the IAU data hub for Dark and Quiet Skies, advising satellite operators on astronomy-friendly practices. His work supports planetary defence efforts for NSF and ESA through technical guidance and policy development.

- **Joan CHEPKEMOI**

Space Education and Awareness Officer, Kenya Space Agency - Kenya

Joan Chepkemai connects astronomy to everyday life through education and outreach at the Kenya Space Agency. She promotes STEM learning, innovation, and socio-economic development via space applications. Passionate about astrotourism, she advocates for dark sky preservation and cultural storytelling, positioning astronomy as a tool for inspiration and economic growth in Kenya.

- **Audrey ALLISON**

Senior Policy Analyst, Center for Space Policy and Strategy, The Aerospace Corporation – USA

Allison advises on global spectrum and orbital policy at The Aerospace Corporation. Formerly Vice President of Global Spectrum Management at Boeing and Chair of the Satellite Industry Association, she has extensive experience in ITU processes and space law. She teaches at the International Space University and authored The ITU and Managing Satellite Orbital and Spectrum Resources in the 21st Century.

Panel 3 - Interactions astronomers/industry: gaps identified and proposals

Tim STEVENSON (Moderator)

Director of Assurance, SKA Observatory – United Kingdom

Tim Stevenson has over four decades of experience in astronomy and space science engineering. Since joining SKAO in 2011, he has contributed to system engineering and assurance. His career spans roles in space-based telescopes and planetary science, working with ESA, global industry, and universities across the UK and the US.

- **Sara LUCATELLO**

President, European Astronomical Society – Italy

Prof. Sara Lucatello is a senior astronomer at INAF and President of the European Astronomical Society. She studies the stellar populations of the Milky Way and advances astronomy through international collaboration and science policy, advocating for sustainable space practices. Her research and leadership promote night sky protection and support the global astronomical community.

- **Samuel Nyangi KIHUHA**

Analyst, Space in Africa - Kenya

Samuel Nyangi is an astronomer and analyst at Space in Africa, providing market intelligence for the continent's space sector. He supports strategic decision-making through data-driven insights and advocates for dark sky preservation. Samuel co-founded Kenya's first astro-tourism training program and contributes to national policy discussions, including Kenya's Space Bill. His work bridges astronomy, policy, and socio-economic development.

- **Artem MOKHNATKIN**

Co-Manager, ISON Initiative, Keldysh Institute of Applied Mathematics – Russia

Artem Mokhnatkin is an astronomer specializing in space object tracking. He co-manages the ISON initiative, coordinating a global telescope network for monitoring satellites and near-Earth asteroids. With experience at Pulkovo Observatory and the University of Texas at Austin, he contributes to international efforts on space sustainability and data-sharing frameworks.

- **Jeffrey SHADDIX**

Vice President, Space Surveillance and Systems, Slingshot Aerospace – USA

Jeff Shaddix leads Slingshot Aerospace's R&D team focused on sensing, tracking, and analytics for space situational awareness and safety. With prior roles at Sandia National Laboratories and Numerica Corporation, he specializes in electro-optical system design and sensor calibration. Jeff holds an M.Sc. in Electrical Engineering from Texas A&M and advocates for responsible space operations.

Pitch speakers

- **Kristina VUKOSAVLJEVIĆ**

Double MSc candidate, Delft University of Technology – The Netherlands

Kristina Vukosavljević is pursuing a double MSc in Space Engineering and Robotics at TU Delft and interning at DLR. Her research focuses on dynamic modeling for on-orbit servicing missions. She has hands-on experience in European student space projects, including thermal protection system testing on REXUS 32. Kristina advocates for women in space engineering and brings a systems-level perspective to mission design and spacecraft-environment interaction.

- **Stefan WALLNER**

Senior Researcher, University of Vienna – Austria

Stefan Wallner holds a PhD in astronomy and specializes in measuring and modeling light pollution, skyglow, and atmospheric effects. His work combines observational and theoretical approaches using remote sensing and simulations. An advocate for night sky protection, he serves on the IAU and Austrian astronomy boards and leads public outreach initiatives.

- **Megan PERKS**

PhD Candidate, University of Southampton – United Kingdom

Megan Perks applies systems thinking to space sustainability, developing modelling techniques that integrate diverse perspectives. She contributed to the UK Space Agency's SESA initiative, presented at UN COPUOS STSC 2025. Megan also participates in working groups including the IADC and the Royal Astronomical Society's Satellite Constellations Working Group.

- **Agnieszka SYBILSKA**

Chief Commercial Officer, Sybilla Technologies – Poland

Agnieszka Sybilska combines astrophysics expertise with leadership in SSA services and ESA-funded projects. She contributes to dual-use initiatives like SAURON and EMISSARY and serves on ESA's Zero Debris technical group. Outside work, she promotes endurance sports as a model for collaboration and resilience in space sector innovation.

- **Ryan MOODIE**

Chief Scientific Officer, 3S Northumbria – United Kingdom

Dr. Ryan Moodie is Chief Scientific Officer at 3S Northumbria, advancing sustainable space missions through modeling, simulation, and education. He previously researched particle physics phenomenology at the University of Turin and now focuses on space situational awareness and mission resilience, bridging academic insight with industry innovation.

- **Andrew LAWRENCE**

Professor of Astronomy, University of Edinburgh – United Kingdom

Andy Lawrence is a leading expert in survey astronomy and quasars. Since 2020, he has championed dark sky protection through public outreach and policy engagement. He chairs the Satellite Constellations Working Group of the UK Royal Astronomical Society, advancing legal and technical responses to satellite impacts.

DAY 3

Keynote on Outer Space Treaty high-level principles

Tanja MASSON-ZWAAN

Deputy Director, International Institute of Air and Space Law – Netherlands

A globally recognized expert in space law, Dr. Tanja Masson-Zwaan advises international organizations, contributes to space governance initiatives, and teaches worldwide. She co-authored Introduction to Space Law textbook, chairs the editorial board of Air and Space Law, and was appointed Officer in the Order of Orange-Nassau for her contributions to the field.

Session 6 - Regulatory initiatives started at national level: status and lessons learnt

Andrew MACPHERSON, SKAO (Chair)

Head of Legal, SKA Observatory – Australia

Andrew leads legal operations at SKAO's Science Operations Centre in Perth. A former Royal Australian Air Force officer and seasoned lawyer, he represents SKAO globally, including at the UN and professional bodies. A member of the International Institute of Space Law, Andrew explores applying space law principles to terrestrial astronomy.

- Marieta VALDIVIA LEFORT

Policy & Diversity Officer, Royal Astronomical Society – United Kingdom

Marieta Valdivia Lefort is a PhD candidate at UCL and Policy & Diversity Officer at the Royal Astronomical Society. Her work spans science policy, satellite interference, and astronomy protection frameworks. She collaborates with the Space Court Foundation, IAU CPS, and Open Lunar Foundation, contributing to global efforts in space law and governance. Marieta advocates for inclusive and sustainable space science across Latin America and beyond.

- Yana YAKUSHINA

PhD Researcher, Ghent University – Belgium

Yana Yakushina specializes in space law and environmental policy, focusing on light and noise pollution as emerging challenges. She coordinates research within the Horizon Europe PLAN-B project and contributes to the Space Court Foundation. Yana collaborates with global organizations to advance dark sky protection and integrates sustainability into space governance frameworks.

- **Eduardo UNDA-SANZANA**

Director, Astronomy Center (CITEVA), Universidad de Antofagasta - Chile

Dr. Eduardo Unda-Sanzana directs the Astronomy Center at the Universidad de Antofagasta (CITEVA) and founded the Ckoirama Observatory, which focuses on research into satellite interference in astronomical observations. Dr. Unda-Sanzana has led key initiatives on light-pollution regulation, including reforms recognizing artificial light as a pollutant and proposals for Chile's first protected astronomical zones, while serving in national and scientific leadership roles.

- **Marcelo COLAZO**

Manager – Technological Liaison, CONAE - Argentina

Dr. Marcelo Colazo is an astronomer and Technology Liaison Manager at Argentina National Commission on Space Activities (CONAE). He coordinates the scientific use of deep space antennas and develops satellite data applications. Formerly Head of CONAE's Córdoba Ground Station and the Area of Extraterrestrial Studies, he leads international cooperation projects and conducts radioastronomical research. His work bridges space science and technology to support Argentina's space initiatives.

- **Hafiz Umer Hameed KHAN**

Manager – Scientific Research, SUPARCO - Pakistan

Hafiz Umer Khan leads Pakistan's first large-aperture observatories at Pakistan Space & Upper Atmosphere Research Commission (SUPARCO), advancing space situational awareness and deep space research. He contributed to the APSSO project under APSCO, focusing on satellite and debris tracking. His research spans orbital dynamics and exoplanet detection. Umer actively promotes astronomy education and has presented at international conferences across Asia-Pacific. He holds a BS and M.Phil. in Space Science from the University of the Punjab.

- **Nompucuko NONTOMBANA**

Councillor, ICASA – South Africa

Ms. Nompucuko Nontombana is a Councillor at Independent Communications Authority of South Africa (ICASA), leading regulatory and governance committees. With over 20 years in public service, she previously managed market conduct at South Africa's Competition Commission. She holds advanced degrees in economic policy and business leadership and was recognized among top women in global competition law.

Panel 4 - Achieving success at COPUOS: lessons learnt

Aarti HOLLA MAINI (moderator)

Bio previously listed on Day1 Welcome remarks.

- **Ulpia-Elena BOTEZATU**

Space Policy Officer, Space Policy Officer – Romania

Dr. Ulpia-Elena Botezatu chairs the UN COPUOS Scientific and Technical Subcommittee and co-leads ATLAC. As Space Policy Officer at the Romanian Space Agency, she represents Romania in key international forums. With a PhD in Engineering Sciences, she bridges space law, security, and urban resilience, promoting sustainable and cooperative space governance.

- **Mila FRANCISCO FERRADA**

Deputy Head of Mission, Chilean Permanent Mission to the UN in Vienna – Chile

Mila Francisco is a career diplomat with over 20 years at Chile's Ministry of Foreign Affairs. She serves as Deputy Head of Mission in Vienna and has held roles including Head of Human Security and Alternate Representative to the OAS. Mila holds degrees in History, German Studies, and Political Science from universities in Germany and Canada.

- **Marcos GRANADOS GÓMEZ**

Counsellor, Spanish Permanent Mission to the UN in Vienna - Spain

Marcos Granados is a career diplomat with over 15 years at Spain's Ministry of Foreign Affairs. He serves as counsellor in Vienna and has held roles including Chargé d'Affaires in Georgia and EU Coordinator for Security and Counterterrorism. Marcos holds degrees in English Philology and European Political Science from the Institute of Political Science in Paris.

- **Veronique GLAUDE**

Senior Engineer, International Telecommunication Union (ITU) – Switzerland

Veronique Glaude is an expert in radio regulations for space services at ITU and has represented the organization at COPUOS since 2018. She coordinates the ITU SpaceExplorer platform and supports members on regulatory issues. With ITU since 1999, she brings decades of experience in satellite network filings and space sustainability.

Session 7 - Proposals and schedule of preparation until STSC/COPUOS 2026

Federico Javier DI VRUNO (Chair)

Bio previously listed on Status of the Dark and Quiet Skies initiative.

- **Rafael MORO AGUILAR**

Legal Advisor, Spanish Space Agency – Spain

Rafael Moro Aguilar advises on international space law and teaches in Miami. He chaired the IISL Working Group on light pollution and represents Spain at UNCOPUOS. His work spans legal frameworks

for space sustainability, including contributions to the IAUS385 Symposium and the COPUOS Group of Friends of the Dark Sky.

- **Tarcísio BAKAUS**

Coordinator for International Management and Future of Spectrum and Orbit, Anatel – Brazil

Tarcísio Bakaus is a telecommunications engineer and PhD candidate in Space Sustainability at the University of Brasília. With nearly 30 years in telecom, he leads Brazil's international spectrum and orbital affairs at Anatel. He represents Brazil in global forums, chairs CITEL's Terrestrial Services Group, and advocates for sustainable space governance.

- **Aaron BOLEY**

Professor, University of British Columbia – Canada

Aaron Boley researches planetary dynamics, meteoritics, and space sustainability. He co-directs the Outer Space Institute and co-leads the IAU CPS Policy Hub. His interdisciplinary work bridges astrophysics and law, including co-authoring *Who Owns Outer Space?*, a book on international law and sustainable space development.

- **Giuliana ROTOLA**

Policy Specialist – Italy

Giuliana Rotola specializes in sustainability, governance, and Indigenous methodologies in space law. Her work explores postcolonial approaches and emerging space ecology frameworks. As co-lead of the IAU CPS Policy Hub, she advances interdisciplinary strategies for environmental responsibility and inclusive governance in the space sector.

- **Richard GREEN**

Emeritus Astronomer, University of Arizona – United States

Dr. Richard Green is Emeritus Astronomer at the University of Arizona. He has led major observatories and served as NSF Division Director for Astronomical Sciences. He chairs UN COPUOS and IAU groups on satellite constellations and lunar astronomy, shaping global policy for sustainable space and scientific access to the night sky.

Panel 5 - Looking forward to STSC-2026: a path forward

Aarti HOLLA MAINI (moderator)

Biographies available on previous activities.

Stuart Whittley

Director of Programmes, SKA Observatory – UK

Stuart Whittley oversees delivery of SKAO's advanced radio astronomy-driven Big Data facility. With 28 years in the British Army, he managed global digital services, major transformation programmes, and helped establish UK Space Command's Portfolio Office. Stuart holds multiple postgraduate degrees and brings extensive experience in complex programme delivery and space-based digital services.
