URSI GASS Kraków Poland August 15-22 2026

GENERAL LECTURE 1

Monday August 17, 2026
11:30 - 12:30

Leonid Gurvits

Delft University of Technology, The Netherlands

Space Very-Long-Baseline Interferometry: past, present and future

BIO AUTHOR

Professor Leonid Gurvits specialises in the applications of Very Long Baseline Interferometry (VLBI) in astrophysics, cosmology, and planetary sciences. He has contributed in various capacities to several Space VLBI projects, including the Japanese-led VSOP, the Russian-led RadioAstron (as Project Scientist from 1988 to 2003), and the Chinese LOVEX mission. He served as Principal Investigator for the VLBI Tracking Experiment with ESA's Huygens Probe on Titan (2005) and the Planetary Radio Interferometry and Doppler Experiment (PRIDE) of ESA's Jupiter Icy Moons Explorer (JUICE) mission, launched in 2023. He is currently a member of the science working teams for several next-generation spaceborne VLBI missions. Professor Gurvits is also a Core Member of the gravitational wave ESA Laser Interferometer Space Antenna (LISA) consortium. He holds a Master's degree in Aerospace Engineering from the Moscow Aviation Institute, a Master's degree in Astronomy from the Moscow State University, and a PhD in Astrophysics from the Lebedev Physical Institute. He served as Head of the Space Science and Innovative Applications Department at the Joint Institute for VLBI in Europe (The Netherlands) until his retirement in 2022 and is currently an Adjunct Professor in the Faculty of Aerospace Engineering at Delft University of Technology (The Netherlands). He is an Academician of the International Academy of Astronautics. Leonid Gurvits is currently a Chairman of the URSI-IAU Working Group on Historical Radio Astronomy.

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GENERAL LECTURE 2

Wednesday August 19, 2026
11:30 - 12:30

Anthea Coster
MIT Haystack Observatory, United States

Ionospheric Radio Science: Standing on Giants While Building the Future

BIO AUTHOR

Anthea Coster is a Principal Research Scientist, and an emeritus Assistant Director, at the MIT Haystack Observatory in Westford, MA. At Haystack, she leads a number of global navigation satellite system (GNSS) projects focused on the ionosphere. She received her Ph.D. in Space Physics and Astronomy from Rice University in 1983. While there, she was involved with ionospheric heating experiments at the Arecibo Observatory in Puerto Rico. She began working with GPS in 1985 and, together with her colleagues, built the first real-time ionospheric monitoring system based on GPS. Her global TEC maps based on GNSS data, have been used to image the plume of storm enhanced density (SED), to study the effect of sudden stratospheric warmings in the ionosphere, and to monitor high precision traveling ionospheric disturbances. Her professional interests include physics of the ionosphere, magnetosphere, and thermosphere, GPS positioning and measurement accuracy, space weather, and magnetosphere and ionosphere coupling. She is a Fellow of the Institute of Navigation, serves on the U.S. National Academy's Space Weather Roundtable, and is an outgoing member-at-large in USNC URSI.

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GENERAL LECTURE 3

Friday August 21, 2026
11:30 - 12:30

Gabriele Gradoni

University of Surrey, United Kingdom

Statistical Wave Physics for Complex Electromagnetic Systems: From EMC to Information Theory

BIO AUTHOR

Gabriele Gradoni is Professor and Chair of Wireless Communications at the 6G Innovation Centre, Institute for Communication Systems, University of Surrey, U.K., where he leads the Quantum Electromagnetics Theory and Practice work area. His research combines statistical electromagnetics, quantum and wave chaos, asymptotic and probabilistic methods, metasurface modelling, as well as quantum computational electromagnetics, with applications to electromagnetic compatibility and future wireless communications systems. He received his Ph.D. in electromagnetics from Università Politecnica delle Marche, Italy, in 2010. He held research appointments at the UK National Physical Laboratory, the University of Maryland, and the University of Nottingham, where he later became Professor of Applied Mathematics and Electromagnetic Engineering, jointly appointed in the School of Mathematical Sciences and the Department of Electrical and Electronic Engineering. He was a Royal Society Industry Fellow with BT from 2020 to 2024. Since 2022, he has also been a Visiting Fellow at the University of Cambridge and an Adjunct Professor at the University of Illinois at Urbana-Champaign. He is a member of IEEE, URSI, the American Physical Society, and the Italian Electromagnetics Society, and was elected a Fellow of the Cambridge Philosophical Society in 2025. His honours include two URSI Commission B Young Scientist Awards, the Gaetano Latmiral Prize, and the EuCAP Best Electromagnetics Paper Award.

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