



CO-WoP'2025:

CNES ONERA Workshop on Earth-space radiowave Propagation

Location: ISAE-SUPAERO
10 avenue Edouard Belin – 31055 TOULOUSE – France

Dates: Tuesday 25 – Thursday 27 February 2025

Web site: <https://co-wop2025.sciencesconf.org/>

Applications

The objective of this workshop is to present research activities concerning Earth-space radiowave propagation.

It will address the following applications: NTN (Non Terrestrial Networks including mega-constellations), mobile communications for 5G and 6G, GNSS (Global Navigation Satellite Systems), remote sensing and radio-occultation.

The targeted frequency bands range from HF to EHF, that is from 3 MHz to 300 GHz. Issues related to standardization, e.g. for ITU-R (International Telecommunications Union – Radiocommunications sector) and new frequency bands will be of particular interest.



Topics of interest

- Measurement techniques
 - Sensor technology
 - Data processing
- New propagation techniques and tools using Artificial Intelligence
 - Environment mapping, classification, ...
 - Propagation data processing / modelling
 - Real-time prediction of the channel
- Mobile propagation for satcom and GNSS channels
 - Receiver environment characterization
 - Mobile propagation experiments
 - Mobile propagation modelling
- Ionospheric propagation
 - Medium characterization from Space Weather data
 - Ionosphere climatology and characterization
 - Ionosphere propagation modelling
- Tropospheric propagation
 - Medium characterization from Numerical Weather Prediction
 - Tropospheric propagation experiments including non-GSO
 - Tropospheric propagation modelling
- Satcom system control from channel monitoring
 - Channel detection
 - Fade Mitigation Techniques
 - Performance assessment

Publication of workshop contributions

- Abstracts : 2 pages
- Abstracts will be distributed to the participants, presentation could be distributed under author prior agreement
- Best papers will possibly be included in a special issue of a journal



Practical arrangements

The attendance to the workshop will be free of charge.

Coffee breaks, and proceedings set-up and distribution will be carried out by ONERA.

Workshop dinner will be organized and funded by CNES.

Lunches will be taken at the restaurant of ISAE-SUPAERO and will be paid by the participants.

Schedule

- Deadline for abstract submission: Thursday, 31 October 2024.
- Deadline for inscription: Friday, 17 January 2025.

Organization Committee

Clément Dudal, Xavier Boulanger, Camille Sageaux, Christine Gouhot (CNES)

Laurent Castanet, Corinne de Pablo, Nadine Barriety (ONERA)

José Radzik (ISAE-SUPAERO)

Scientific Committee

Clément Dudal, Xavier Boulanger (CNES)

Laurent Castanet, Laurent Féral, Vincent Fabbro, Jonathan Israël, Julien Queyrel (ONERA)

José Radzik (ISAE-SUPAERO), Alexandre Chabory (ENAC), Michel Bousquet (MIDIVAL)

Partners



Fédération ONERA ISAE-SUPAERO ENAC

