



Source: ESA

2nd Workshop on Space Weather

9th IEEE International Conference on Wireless for Space and Extreme Environments 2021 – October 12-14, 2021 in Cleveland, Ohio, USA

Space Weather is a natural hazard often exposing extreme environments in the near-Earth space and at ground to additional threats. Space Weather impacts include radiation effects affecting space, aviation and, under severe geospace conditions, even ground assets; disturbances to radio-navigation based on Global Navigation Satellite Systems (GNSSs) and to communication systems; increased satellite drag resulting into enhanced probability of collisions with space debris; geomagnetically induced currents impacting power grids, transports and oil/gas pipelines. At the same time, communication systems and wireless sensing offer a cheap and persistent tool to monitor short- and long-term Space Weather phenomena, contributing to the overall understanding of the complex Earth-space system. The workshop aims at pin-pointing the state-of-the-art technologies and initiative facing the Space Weather threats and its impacts in extreme environments, with a particular focus on space and aviation domains. Contributions for technical presentations are encouraged from different research and application Space Weather communities. A panel discussion will be organized at the end of the session to bridge the efforts and the adopted solutions in the different domains.

Workshop Chairs

Luca Spogli
*Istituto Nazionale di Geofisica e
Vulcanologia (INGV, Italy)*

Jan Budroweit
*German Aerospace Center (DLR,
Germany)*

Call for Paper

Authors are encouraged to submit their unpublished works in a full-length research papers (max. 6 pages) and presentation abstracts (1 page) that address space weather and their impact (e.g. radiation effects, GNSS positioning, GIC) including but not limited to the following topics of interest:

- Space Weather instrumentation
- Modelling, forecasting and services for Space Weather
- Planetary Space Weather
- Space Weather threats on precise positioning
- Ground Induced Currents
- Radiation effects in electronics (SEE, TID, DD)
- Radiation Sensing, Monitoring and Dosimetry
- Verification and Qualification
- Lessons Learned, Experiences, Initiatives and Best Practices

Submission Format: Full-length Research Papers/Abstracts (2-col IEEE Style)

Submission Deadline: July 1, 2021

Notification of Acceptance: August 15, 2021

Final Paper: September 15, 2021

Full papers that are presented by registered authors at the conference will be sent to IEEE Xplore for publications

For more information regarding the paper submission, please refer to <https://attend.ieee.org/wisee-2021>



REGION 1

