



1st Workshop on Radiation Effects in Wireless Applications

8th IEEE International Conference on Wireless for Space and Extreme Environments 2020 – October 12-14, 2020 in Vicenza, Italy

Radiation effects are one of the highest challenges and critical impacts for wireless application, whether they are taking place in space, aviation or even on ground-level. Reliability is the key driving element for a safe operation whereas radiation effects on electronics needs to be considered at any time. For example, space missions are required not to fail as it is almost impossible to repair them once they are in space. Thus, the space industries mainly cautious with the use of new available technologies such they are typically not qualified for space applications. Resulting from this fact, the technology being used in space is about 10 years behind to state-of-the-art technologies. Space is thereby not the limiting environment where radiation effects in electronics become an important factor. High-altitude radiation levels could be problematic for avionic safety and even on ground-level relatively low radiation levels can affect electronics, particularly since they are getting more complex and highly integrated. This workshop will cover on radiation effects in wireless application, such as for devices, sensors, circuits and systems.

Call for Paper

Authors are encouraged to submit their unpublished works in a full-length research papers (max. 6 pages) that address radiation effects in wireless sensing, communication and applications, including but not limited to the following topics of interest:

- Total Ionizing Dose (TID) and Displacement Damages (DD)
- Single Event Effects (SEE)
- Radiation Effects on Sensors
- Radiation Sensing, Monitoring and Dosimetry
- TID and SEE on Full System-Level or Application
- Hardening and Mitigation Strategies
- Radiation Test Methodology for Wireless Application
- Verification and Qualification
- Lessons Learned, Experiences and Best Practices

Submission Format: Full-length Research Papers (6 pages, 2-col IEEE Style).

Submission Deadline: July 1, 2020 **July 31, 2020**

Notification of Acceptance: August 20, 2020

Final Paper: September 15, 2020

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-2020>



Workshop Chairs

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