

The 5th Annual IEEE International Wireless for Space and Extreme Environments (WISEE 2017) Conference will be held October 10 to 12, 2017 at Concordia University, Montréal.

Workshop on Space Solar Power (SSP) @ WISEE 2017

Call for Papers and Presentations

Chairs: Seyed (Reza) Zekavat (Michigan Tech), Darel Preble (Space Solar Power Institute)

This two-day workshop will provide a forum for researchers and developers working on space solar power (SSP) topics to highlight progress and needs, to discuss these different technologies, and take necessary actions toward the implementation of solar power satellites or sunsats. Workshop information will be posted on the workshop's website.

Workshop Highlights: Papers, presentations and keynotes are encouraged from industry, academic and government researchers, program managers, and representatives and students. Accepted papers will be published at IEEE Xplore and presented at the workshop. The workshop accepts talks only, and papers + talks. Papers should be submitted online and follow WISEE 2017 format and submission approach. The workshop highly encourages student attendance and presentations.

The topics include but not limited to:

1. **Communication requirements and Interference studies for SSP construction, including ITU adoption of a frequency assignment for SSP use;**
2. An assessment of the most relevant technologies and implementations for SSP;
3. Opportunities for cooperation and competition to promote development of SSP technologies.
4. Communication requirements (frequency allocation for SSP use, interference & bandwidth) with sensors and robotics structures for SSP;
5. Wireless Power Transfer (WPT) / Microwave Power Transfer (MPT) Technologies including (space-to-space, space-to-ground, ground-to-ground, ground-to-space) grids;
6. Needs for Educating Next Generations while stimulating development of WPT/MPT;
7. SSP Photovoltaics power planning, superconducting power management design, construction, maintenance and operational techniques
8. SSP Energy-Economics overview; Fossil Energy Resources and Green Energy alternatives;
9. National & International SSP projects (technologies, industries, companies, coordinated Research, SSP Power Beaming Competitions and challenges);
10. Wireless Channel (impact of power; frequency, bandwidth);
11. Massive Phased Arrays/MIMO and Beam-forming strategies for WPT/MPT;
12. Antenna and Solar Cell integration Technologies;
13. Power Harvesting (e.g., Rectenna) Design;
14. Transmission Schemes: modulation, multiple access, frequency;
15. Ground and space segment design, operation, control, and Orbital Security;
16. Multi-layer power transfer (Air-to-Water, Air-to-body, etc.);

Please see WISEE 2017 **Call for Papers** at <http://sites.ieee.org/wisee/call-for-papers>

Paper submission deadline	July 1, 2017
Acceptance notification	August 1, 2017
IEEE PDF eXpress version	September 1, 2017
Early registration deadline	September 10, 2017