

Workshop: Current Challenges for Space Solar Power

IEEE WiSEE 2015, Dec. 14-15 2015, Orlando FL

Call for Papers and Talks

MichiganTech



Important Dates:

Full Paper/Talk Abstract Submission: Aug. 01 2015

Review Complete: Sept. 01 2015

Uploading Final Papers: Sept. 15 2015

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

Contact: rezaz@mtu.edu and darel.preble@comcast.net

This workshop provides a forum for researchers and developers working on Space Solar Power (SSP) to facilitate and highlight developing SSP technologies, to determine and advance the state of the art, to discuss supporting and related technical issues in this area, and take necessary action to improve implementations. It investigates SSP applications in Space-to-Ground (Space Solar Power), Space-to-Space, Ground-to-Space and Ground-to-Ground power transfer.

Papers, presentations and keynotes selected from researchers, program managers, industry representatives, and academics are accepted. 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 through EDAS and follow IEEE WiSEE 2015 format. Talk abstracts should be submitted online through EDAS as well.

Talks will be invited to highlight topics including (but not limited to):

1. Technological and policy needs for stimulating development of SSP;
2. Educating Next Generations on Space Solar Power;
3. Economics of Space Solar Power;
4. Design and Development Challenges;
5. Wireless Channel (impact of power; frequency, bandwidth);
6. Massive Phased Arrays/MIMO for Space Solar Power;
7. Beam-forming strategies for power beaming;
8. Antenna and Solar Cell integration Technologies;
9. Power Harvesting Unit (e.g., Rectanna) Design;
10. Transmission Schemes: modulation, multiple access, frequency;
11. Wireless Power distribution and Relaying (space-to-space, space-to-ground, ground-to-ground, and ground-to-space);
12. Ground and space segment design, operation and control;
13. Space-based smart grids;
14. Multi-layer power transfer (Air-to-Water, Air-to-body, etc.)