

## Space Solar Power

As of 5-10-18

### Wednesday, May 23 Seminar Room (2nd floor)

#### SPS Welcome and the Vision of Space Solar Power

- 8:00 am Welcome: Opening Remarks. John C. Mankins (Mankins Space Technology) and Gary Barnhard (Xtraordinary Innovative Space Partnerships, Inc.)
- 8:10 am The Vision of Space Solar Power: Imperatives. Darel Preble (Space Solar Power Initiative)
- 8:40 am The Vision of Space Solar Power: Perspectives. Dr. Don Flournoy (University of Ohio, retired)
- 9:10 am The Vision of Space Solar Power: Lunar Power & Light Company. Gary Barnhard (Xtraordinary Innovative Space Partnerships, Inc.)
- 9:40 am The Vision of Space Solar Power: Taking a Larger View. John C. Mankins (Mankins Space Technology)
- 10:00 am Wireless Power Spectrum Workshop. John C. Mankins (Mankins Space Technology) and Dr. James McSpadden (Raytheon, Inc.)

#### IAA Decadal Assessment Kick-Off Meeting

- 2:00 pm Overview of the IAA Study. John C. Mankins (IAA Study Group)
- 2:30 pm Overview of China Space Solar Power Activities. Dr. Li Wang (China Academy of Space Technology)
- 3:00 pm Working Discussion

### Thursday, May 24 Seminar Room (2nd floor)

#### Commemoration: 50 Years of SPS

- 10:00 am Stepping Stones to Space Solar Power. Richard Dickinson (NASA Jet Propulsion Laboratory, retired)
- 10:15 am Remembering Peter Glaser (by video). Gregg Maryniak (XPRIZE Foundation)
- 10:30 am Remembering Peter Glaser. Hal Walker, Jr. (A-Man, Inc.)
- 10:45 am 50 Years of Space Solar Power: A Retrospective. Guy Pignolet (CNES, retired)
- 11:15 am 50 Years of Space Solar Power: A Retrospective. John C. Mankins (Mankins Space Technology)
- 11:30 am Panel: 50 Years of SPS. Richard Dickinson (NASA Jet Propulsion Laboratory, retired), Hal Walker, Jr. (A-Man, Inc.), Guy Pignolet (CNES, retired) and John C. Mankins (Mankins Space Institute). Moderator: Gary Barnhard (Xtraordinary Innovative Space Partnerships, Inc.)

## Space Solar Power

<b>Thursday, May 24</b>	<p><b>Seminar Room (2nd floor)</b></p> <p><b>Recent Developments in SPS - Concepts and Programs</b></p> <p>2:00 pm Space Solar Power Concept: CASSIOPeiA. Ian Cash (International Electric )</p> <p>2:15 pm Space Solar Power Concept: SSP Initiative. Dr. Michael Kelzenberg (California Institute of Technology)</p> <p>2:30 pm Space Solar Power Japanese Activities. Koji Tanaka (Japan Aerospace Exploration Agency)</p> <p>2:45 pm Space Solar Power Concept: SPS-ALPHA. John C. Mankins (Mankins Space Technology)</p> <p>3:00 pm Improved OMEGA Project of Solar Power Satellite (SSPS). Prof. Baoyan Duan (Xidian University)</p> <p>3:15 pm Propulsion Power Satellite. Keith Henson (Independent Researcher)</p> <p>3:30 pm Panel: Space Solar Power Concept Alternatives. Moderator: Dr. Paul Jaffe (Naval Research Laboratory)</p> <p><b>Recent Developments in SPS - Demos</b></p> <p>4:00 pm Criteria for Comparison of Power Beaming Demos. Dr. Paul Jaffe (Naval Research Laboratory)</p> <p>4:15 pm Panel: Space-to-Space Power Beaming Missions. Dr. Paul Jaffe (Naval Research Laboratory), David Dunlop, Brad Blair (NewSpace Analytics) and Joe Rauscher. Moderator: Gary Barnhard (Xtraordinary Innovative Space Partnerships, Inc.)</p> <p>4:55 pm R&amp;D in Japan (by video) Dr. Naoki Shinohara (Kyoto University)</p>
<b>Friday, May 25</b>	<p><b>Laguna Room</b></p> <p><b>Recent Developments in SPS: Research &amp; Development</b></p> <p>10:00 am Overview of Wireless Power Transmission Research and Development in China. Dr. Shiwei Dong (China Academy of Space Technology)</p> <p>10:15 am Space Solar Power Orbital Options. Dr. Seth D. Potter (SDP Space Systems)</p> <p>10:30 am Experimental Demo of Wireless Power Transmission for Space Solar Power. Dr. Mingyu Lu (West Virginia University Institute of Technology)</p> <p>10:45 am Economic Model for Power Sats. Keith Henson (Independent Researcher)</p> <p>11:00 am Panel: Where does the Status of Space Solar Power "Stand" Globally? Gary Barnhard (Xtraordinary Innovative Space</p>

## Space Solar Power

Friday, May 25

Laguna Room

### International SSP Student Competition Presentations

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| 2:00 pm | Thin-film Sensors to Detect Debris Damage. Kenloy Morris (University of Maryland)                                 |
| 2:15 pm | Development of an RFID System for SPS-ALPHA. Chukwuma Odigwe (University of Maryland)                             |
| 2:30 pm | Reflector Pointing Control for Optimal Power Generation. Hassan Nisar (University of Maryland)                    |
| 2:45 pm | LCOE Cost Analysis of Modular SPS. Jay Corbett (United States Naval Academy)                                      |
| 3:00 pm | Optical Characteristics and Optimal Design for SPS-ALPHA. Xian-Long Meng (Harbin Institute of Technology, China)  |
| 3:15 pm | Space Demonstration: SACULA Project. Tatsuya Yamagami (Hosei University, Japan)                                   |
| 3:45 pm | Thick Panel Folding for Microwave-type Planar SSPS. Shinnosuke Hashimoto (Muroran Institute of Technology, Japan) |
| 4:00 pm | Announcement of Finalist  |
| 4:15 pm | Summary Remarks. Gary Barnhard (Xtraordinary Innovative Space Partnerships, Inc.)                                 |
| 4:35 pm | Summary Remarks. John C. Mankins (Mankins Space Technology)   |