



Technology Session

Pat Beauchamp

JPL-Caltech

February 19

OPAG Posters

- Parametric Analyses of an Advanced RTG – David Woerner
- 30W Boost in MMRTG Power Delivered at Beginning of Life & 50W at End of Design Life – David Woerner
- High-Efficiency Stirling Generators for Science & Human Exploration – June Zakrajsek, GRC
- Nano-Spacecraft for Outer Solar System Exploration: 1. Science Case, Concepts, and Instruments – Julie Castillo
- Nano-Spacecraft for Outer Solar System Exploration: 2. Technology state of the art and way forward – Julie Castillo
- Titan Aerial Daughtercraft – Larry Matthies
- High spatial resolution IR imaging system for Outer planetary missions – Alex Soibel
- Outer Planet Flagship Missions with ARM-derived Electric Propulsion Stage – Damon Landau and Nathan Strange

SLS

SLS – Steve Creech (MSFC)

- I asked him about the rule for nuclear missions because I had heard that you have to do 7 safe flights before allowing nuclear power on board.
 - He said that it was an ELV rule that Launch services program has. SLS, since it has a lot of heritage hardware with multiple flights from shuttle, and will be human rated, they believe will be less.
 - There is a process that they have to go through. They were about to get started on that for Europa when they went solar power.
 - He said that for nuclear powered s/c the process for nuclear certification takes time and will cost effort so we will need a requirement before completing. He suggested we plan mid-2020s for OPAG purposes.
- He will attend the next OPAG meeting.