

## 9<sup>th</sup> NASA Space Exploration & Space Weather Workshop

Agenda, September 26th-27th, 2017, Location: NASA GSFC, Bldg 21, Rm. 183A&B

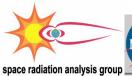
09:00am – 12:00pm	September 26th, 2017 - Session I
9:00am	Welcome and plan for the day one (Y. Collado-Vega, NASA GSFC)
9:10am	NASA HQ Heliophysics view of space weather and space weather needs (E. Talaat, NASA HQ)
9:30am	NASA HQ HEOMD view of space weather and space weather needs (J. Allen, NASA HQ)
9:50am	NASA GSFC HSD view of space weather (A. Pulkkinen, NASA GSFC)
10:10am	An Overview of the Space Weather Motivation for the "Notional" Geospace Dynamics Constellation Mission (R. Pfaff, NASA GSFC)
10:30am	Break
10:40am	NASA Technical Fellow for space environments (M. Xapsos, NASA GSFC)
11:00am	Agency radiation requirements and overview of radiation risk (E. Semones, NASA JSC)
11:20am	Radiation hazard for human space exploration (K. Lee, NASA JSC)
11:40pm	Upcoming Mission: Parker Solar Probe (N. Raouafi, JHU/APL)
12:00pm	Lunch
01:00pm - 05:00pm	September 26 <sup>th</sup> , 2017 - Session II
1:00pm	NASA GSFC CCMC/SWRC space weather services: status, future plans and updated space weather needs document (Y. Collado-Vega, NASA GSFC)
1:20pm	CCMC space weather tools demo (J. Bobblit and R. Mullinix, NASA GSFC)
1:30pm	KSC Presentation (K. Winters, USAF)













1:50pm	DSCOVR mission update (A. Szabo, NASA GSFC)
2:10pm	GOES-16 Space Weather Sensors, Mission Status, Investigation Needs
	(P. Sullivan, NASA GSFC)
2:30pm	SAP space weather operations status (P. Schuck, NASA GSFC)
2:50pm	EOS Aqua and Aura team space weather view (W. Guit, NASA GSFC)
3:10pm	Break
3:20pm	Neutral Atmospheric Density Modeling and the Conjunction Assessment Problem
_	(M. Johnson, NASA GSFC)
3:40pm	Solar Orbiter (C. St. Cyr, NASA GSFC)
4:00pm	OSIRIX-ReX Space Weather Needs (K. Getzandanner, NASA)
4:20pm	JPL Space Weather Views (J. Hunt, NASA JPL)
4:40pm	SCI systems of systems approach to radiation mitigation (R. Lewis, NASA GSFC)
5:00pm	Lessons learned from BARREL coordination efforts: Using space weather predictions to maximize multi-mission efforts (A. Halford, NASA GSFC)
5:20pm	Workshop first day summary and plan for the day two (Y. Collado-Vega, All)

 $5{:}30 pm$  - Workshop No Host Social: SoBe Restaurant (Very close to GSFC) http://www.soberestaurantandlounge.com













00.00 12.00	C. A. J. 27th 2017 C
09:00am – 12:00pm	September 27th, 2017 - Session I: (Human/Robotics Space Exploration & Space Weather) - SEP Models and Event
9:00am	Welcome and plan for the day two (Y. Collado-Vega, NASA GSFC)
9:10am	Current and future needs for space weather observational and operational capacity in support of human space exploration (K. Lee and E. Semones, NASA JSC)
9:40am	Summary from last year's discussion and findings and Development efforts for Radiation mitigation capabilities (A. Pulkkinen, NASA GSFC)
10:10am	SPENVIS Next Gen (E. De Donder and N. Messios, BIRA-IASB)
10:30am	Break
10:40am	SEP Event Case Study Description – January 2012 (L. Mays, NASA GSFC, K. Lee, NASA JSC, ALL)
11:00am	REleASE Model (A. Posner, NASA HQ)
11:20am	EPREM Model and applications (N. Schwadron, UNH)
11:40am	SEPMOD Model (J. Luhman, Berkeley)
12:00pm	Lunch
01:00pm – 05:00pm	September 27 <sup>th</sup> , 2017 - Session II: SEP Models and Event (Continuation)
1:00pm	Modeling Particle Acceleration with the SWMF (I. Sokolov and V. Tenishev, UMICH)
1:30pm	Discussion among small groups
2:00pm	SEP Event Case Study Results Discussion – January 2012 (L. Mays, NASA GSFC, K. Lee, NASA JSC, ALL)
2:30pm	Total Dose Survivability of Hubble Electronic Components (M. Xapsos, NASA GSFC)
2:50pm	SEP Observations from BARREL (A. Halford, NASA GSFC)
3:10pm	Break
3:20pm	Summary of Radiation and Plasma Environment Team Progress and Surface Charging Validation Demo (Y. Zheng, NASA GSFC)



3:40pm	Solar Proton Radiation Environment Requirements for JPL's Robotic Space Missions (M. Ratliff, NASA JPL)
4:00pm	A Brief Review of the Lunar Human Exploration Strategic Knowledge Gaps regarding the Space Environment (W. Farrell, NASA GSFC)
4:20pm	Summary of findings and closing remarks (CCMC/SWRC team, NASA GSFC)