

Parker Solar Probe

Solar Working Group Meeting #18 – Nov. 20-22, 2019

Caltech Campus

Hameetman Auditorium, Cahill Building

1216 East California Blvd, Pasadena, CA 91125

Meeting Agenda – Nov. 20, 2019

Sessions	Contributions	Speakers	Time Allocations (minutes)	Clock
Opening, Project Status and Overview After the First three Orbits	Welcome and Logistics	N. Raouafi M. Wiedenbeck	5	8:00-8:05
	NASA/Heliophysics Division Update & Parker Silver Medal Team Award	Nicky Fox	25	8:05-9:00
	Project Status Update	Patrick Hill	15	9:00-9:15
	Project Science Update	Nour Raouafi	15	9:15-9:30
	System Engineering & Operations	Robin Vaughan	20	9:30-9:50
	Dust Analysis	Doug Mehoke	20	9:50-10:10
	Data Public Release	Lan Jian	15	10:10-10:25
	Solar Orbiter	Teresa Nieves	10	10:25-10:35
BREAK			15	10:35-10:50
Science Investigations: Status and Overview After the First Three Orbits	IS \odot IS	D. McComas	25	10:50-11:15
	WISPR	R. Howard	25	11:15-11:40
	FIELDS	S. Bale	25	11:40-12:05
	SWEAP	J. Kasper	25	12:05-12:30
BREAK			15	12:30-12:45
Dust	The Near-Sun Dust Environment: Initial Observations from Parker Solar Probe	Jamey Szalay	20	12:45-13:05
	Variability of Inner Heliospheric Dust: Comparing and Contrasting the First Three Solar Encounters	David Malaspina	20	13:05-13:25
	PSP/WISPR Observations of the Dust Trail of (3200) Phaethon	Karl Battams	20	13:25-13:45
	Interplanetary Dust Observations	Guillermo Stenborg	20	13:45-14:05
LUNCH			85	14:05-15:30

Splinters	Topic	Lead(s)	Contributors	Room
15:30	Data Workshop: Orbit 3	J. Szalay	Four Science Teams	370 (capacity 28)
-	WISPR Meeting	A. Vourlidas	WISPR Team	273 (capacity 22)
18:30	Large-Scale structures	A. Szabo/K. Korreck		312 (capacity 18)

November 21, 2019

Sessions	Contributions	Speakers	Time Allocations	Clock
Switchbacks, Jets, Polarity Reversals	Sharp Alfvénic Impulses in the Near-Sun Solar Wind	T. Horbury/S. Bale	20	8:00-8:20
	Alfvénic turbulence, switchbacks and solar wind acceleration	M. Velli	20	8:20-8:40
	TBD	J. Kasper	20	8:40-9:00
	Localized Magnetic Field Structures and their Boundaries in the Near-Sun Solar Wind from Parker Solar Probe Measurements	Volodya Krasnoselskikh	20	9:00-9:20
	Heat Flux and Switchbacks	Phyllis Whittlesey	20	9:20-9:40
CMEs, SEPs, and CIRs	BREAK		15	9:40-9:55
	Up-Close Imaging of a Pristine CME: I. Remote Sensing Observations	Philip Hess	20	9:55-10:15
	Morphological Reconstruction of a Small Transient Observed by Parker Solar Probe on 2018 November 5	Brian Wood	20	10:15-10:35
	³ He-rich Solar Energetic Particle Observations at Parker Solar Probe and Near Earth	Mark Wiedenbeck	20	10:35-10:55
	Seed Population Pre-Conditioning and Acceleration Observed by Parker Solar Probe	Nathan Schwadron	20	10:55-11:15
	Solar Wind Streams and Stream Interaction Regions Observed by Parker Solar Probe with Corresponding Observations at 1 AU	Robert Allen	20	11:15-11:35
	A small “Z-rich” SEP Event (2-3 April 2019) Observed at 0.18 AU by ISOIS/EPI-Lo: Acceleration, Propagation, and Magnetic Connection	Ed Roelof	20	11:35-11:55
	Observations of the 4 April 2019 Solar Energetic Particle Event at Parker Solar Probe	Rick Leske	20	11:55-12:15
	Identification of Magnetic Flux Ropes from Parker Solar Probe Observations during the First Encounter	Lingling Zhao	20	12:15-12:35
	BREAK		15	12:35-12:50
	Analysis of the Internal structure of the Streamer Blow Out Observed by the Parker Solar Probe during the First Solar Encounter	Teresa Nieves-Chinchilla	20	12:50-13:10
	Solar Energetic Particles Produced by a Slow Coronal Mass Ejection	Joe Giacalone	20	13:10-13:30
	Energetic Particle Increases Associated with Stream Interaction Regions	Christina Cohen	20	13:30-13:50
	Properties of Suprathermal He Nuclei Associated with Dispersionless Intensity Enhancements observed by the Parker Solar Probe during the First Two Encounters	Mihir Desai	20	13:50-14:10
	CME -Associated Energetic Ions at 0.23 AU — Consideration of the Auroral Pressure Cooker Mechanism Operating in the Low Corona as a Possible Energization Process	Don Mitchell	20	14:10-14:30
LUNCH			60	14:30-15:30

Splinters	Topic	Lead(s)	Contributors	Room
15:30-18:30	Alfvénic Switchbacks	M. Velli	Velli, Bale, Chaston, Horbury, Drake, Tenerani	370 (capacity 28)

November 22, 2019

Sessions	Contributions	Speakers	Time Allocations	Clock
Heating & Acceleration of the Solar Wind	Stability in the Inner Heliosphere: Extending Inward from Helios	Kris Klein	20	8:00-8:20
	The Enhancement of Proton Stochastic Heating in the near-Sun Solar Wind	Mihailo Martinovic	20	8:20-8:40
	PSP observations of magnetic reconnection during Encounter 1	Tai Phan	20	8:40-9:00
	Ion Scale Electromagnetic Waves in the Inner Heliosphere	Trevor Bowen	20	9:00-9:20
	Near-fce Plasma Waves in the Solar Wind	David Malaspina	20	9:20-9:40
	Statistics and Polarization of Type III Radio Bursts Observed in the Inner Heliosphere	Marc Pulupa	20	9:40-10:00
	Enhanced Energy Transfer Rate in Solar Wind Turbulence Observed near the Sun from PSP	Riddhi Bandyopadhyay	20	10:00-10:20
BREAK			15	10:20-10:35
Magnetic Field Mapping and HCS Locations	Venus Flyby 2 Science and Beyond	Shannon Curry	20	10:35-10:55
	Global MHD modeling of the Solar Corona and Inner Heliosphere during PSP's First Perihelion: Comparison with Observations	Pete Riley	20	10:55-11:15
	Magnetic structure in the first PSP Encounters : PFSS results and multi-spacecraft comparisons from Encounters 1-3	Sam Badman	20	11:15-11:35
	The Heliospheric Current Sheet observed by Parker Solar Probe during Encounter 1	Adam Szabo	20	11:35-11:55
	Exploring solar wind origins and connecting plasma flows from Parker Solar Probe to 1 AU: non-spherical source surface and Alfvénic fluctuations	Olga Panasenco	20	11:55-12:15
	Observations of a Magnetic Island	Mark Linton	20	12:15-12:35
	Modeling Solar Wind and Magnetic Field along the Parker Solar Probe Trajectory with the Multi-Scale Fluid-Kinetic Simulation Suite	Nikolai Pogorelov	20	12:35-12:55
LUNCH			65	12:55-14:00
	Evolution and Role of Solar Wind Turbulence in the Inner Heliosphere	C. Chen/S. Bale	20	14:00-14:20
	Measures of Scale Dependent Alfvénicity in the First PSP Encounter	Tulasi Parashar	20	14:20-14:40
	Turbulence Transport Modeling and First Orbit Parker Solar Probe (PSP) Observations	Laxman Adhikari	20	14:40-15:00
	PVI statistics and its relation to heating and energetic particles from PSP	R. Qudsi	20	15:00-15:20
	Observations of enhanced energetic-particle population along intermittent structures near the Sun from PSP. Lead author and presenter	Riddhi Bandyopadhyay	20	15:20-15:40
Summary of Splinters				15:40-16:30
Meeting Adjourn				16:30

Splinter Sessions

Data Workshop

Description: limited attendance from key members of the four instrument teams to work on issues in the data and foster closer collaborations on projects.

Leads: Jamey Szalay, ...

Attendance: S. Bale, J. Kasper D. McComas, R. Howard, N.E. Raouafi,

Room (capacity):

WISPR Team Meeting #3, Nov. 20, 2019, 2:30-6:00pm

Description: Agenda is being formulated. The first half (2:30 – 4 pm) is devoted to WISPR instrument and operations status. The 2nd half is focused on science results and future plans.

Leads: A. Vourlidas, R. Howard

Attendance (15-20 people):

Room (capacity): 273

Alfvénic Switchbacks: Properties & Potential Sources, Nov. 20, 2019, 2:30-6:00pm

Description: Agenda is being formulated. The first half (2:30 – 4 pm) is devoted to WISPR instrument and operations status. The 2nd half is focused on science results and future plans.

Leads: M. Velli

Attendance (15-20 people):

Room (capacity): 273

1. Room 204 (14)

- i. 11/20 = 2 pm - 6 pm
- ii. 11/21 = 9:30 am - 6 pm
- iii. 11/22 = 7 am - 8 am and 3 pm - 6 pm

2. Room 211 (10)

- i. 11/20 = 7 am - 3 pm and 4 pm - 6 pm
- ii. 11/21 = 7 am - 1 pm
- iii. 11/22 = 7 am - 11 am and 12 pm - 6 pm

3. Room 273 (22)

- i. 11/20 = 2:30 pm - 6 pm
- ii. 11/21 = 3 pm - 6 pm
- iii. 11/22 = 7 am - 1 pm and 3 pm - 6 pm

4. Room 370 (28)

- i. 11/20 = 7 am - 7 pm
- ii. 11/21 = 7 am - 10:30 am and 1:30 pm - 4 pm
- iii. 11/22 = 7 am - 10:30 am

5. Room 312 (18)

- i. 11/20 = 7 am - 7 pm
- ii. 11/22 = 7 am - 3 pm

Meeting Logistics

Location

The SWG (Nov. 20-22, 2019) will be at Hameetman Auditorium, Cahill Building, Caltech Campus. The address of the building is 1216 East California Blvd, Pasadena, CA 91125. A map can be found at https://sppgway.jhuapl.edu/docs/SWG/20191120/Caltech_Map.pdf

Parking

https://sppgway.jhuapl.edu/docs/SWG/20191120/Caltech_Parking_Map_Calif_Structure.pdf

Meals and Breaks

At Caltech, the standard place to get lunch is the Chandler Café. There are also a few other options (other, smaller lunch places on campus, places to buy a sandwich for take-out, one lunch truck, and some commercial places that require a walk of ~0.5 mile).

Poster Session

TBC.

Internet Access

TBC.

Remote Access

A WebEx will be circulated to the SWG mailing list for those who cannot attend in person.

Emergency Contacts

If you have a question or problem during the visit feel free to contact Mark Wiedenbeck (mark.e.wiedenbeck@jpl.nasa.gov) or Deborah Miles (Debby) (dmiles@caltech.edu).