**2014 LWS Meeting Agenda / Science Program**  
*(as of Oct. 29, 2014)*

### Sunday, Nov. 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>9:00 am – 5:00 pm</td>
<td><strong>Solar-C Team Meeting</strong> <em>(Cascade Ballroom – 3 Sisters/Mt. Bachelor, Level 2)</em></td>
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| 4:00 pm – 5:30 pm| **SDO Science Working Group Meeting** *(Cascade Ballroom – Mt. Hood/Mt. St. Helens)*  
This meeting will include presentations on the current status of the SDO spacecraft and mission, discussions of our current operational issues, and future plans and objectives. |
| 5:30 pm – 7:00 pm| **2014 LWS Meeting – Welcoming Reception**  
*DoubleTree Hotel – Pacific Northwest Ballroom, Level 1* |

### Monday, Nov. 3

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<th>Time</th>
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| 7:00 am          | **On-site Registration and Check-In Opens** *(Lobby, Level 1)*  
10:15 am – 10:45 am| **Break** |
| 10:45 am – 12:30 pm| **Plenary Session 1b. Reconnection and Magnetic Instabilities in Geospace, Heliosphere, and Solar Atmosphere** *(Cascade Ballroom, Level 2)*  
Session Chair: Karel Schrijver, Lockheed Martin, SAL, Palo Alto, CA  
10:45 am **Kanya Kusano**, *Dynamical Petscheck Reconnection*  
11:10 am **Gordon Holman**, *Magnetic Evolution, Reconnection and Particle Acceleration in Solar Flares: Insights from RHESSI*  
11:35 am **Mikhail Sitnov**, *Magnetic Reconnection, Buoyancy and Flapping Motions in Magnetotail Explosions*  
12:00 pm **Ian Mann**, *The Impacts ULF Waves on the Dynamics of the Earth’s Van Allen Belts*  
12:25 pm **Open Discussion** |
| 12:30 pm – 2:00 pm| **Lunch (on your own)** |
2:00 pm – 3:45 pm **Poster Session – P1/P2** (Monday/Tuesday group)  
(Lloyd Center, Level 1)  
(featureing Topics 2a, 2b, and Hinode/IRIS Splinter Sessions)

2:00 pm – 3:45 pm **Splinter Session S-1 (4b). Heliophysics and Space Weather in the Coming Decade**  
(Cascade Ballroom – Mt. Hood/Mt. St. Helens, Level 2)  
**Session Chair:** Karel Schrijver, Lockheed Martin, SAL, Palo Alto, CA  
2:00 pm **Madhulika Guhathakurta**, Living With a Star: Science That Matters to People – Past Accomplishments and Future Promise  
2:20 pm **Marco Velli**, The Solar Probe Plus Mission and our Understanding of the Solar Wind and Heliosphere  
2:40 pm Mona Kessel (presented by **Shing Fung**), Geoscience Current and Future Space Weather Plans  
3:00 pm **Andres Munoz-Jaramillo**, How the Statistical Analysis of Magnetic Structures Will Help Us Usher a New Generation of Solar Cycle Predictions  
3:15 pm **Chigomezyo Ngwira**, Challenges in Modeling of Extreme Space Weather Events  
3:30 pm **Open Discussion**

3:45 pm – 4:15 pm **Break**

4:15 pm – 6:00 pm **Splinter Session S-2 (1a). Magnetic Energy and Field from Solar Interior to Corona**  
(Cascade Ballroom – 3 Sisters/Mt. Bachelor, Level 2)  
**Session Chair:** Todd Hoeksema, Stanford University, Stanford, CA  
4:15 pm **Shane Alpert**, Hi-C Observations of Penumbral Bright Dots: Comparison with the IRIS Results  
4:30 pm **Anna Malanushenko**, Modeling of the Coronal Magnetic Field and Plasma Heating: New frontiers in the SDO epoch  
4:45 pm **Sanjiv Tiwari**, Transition-Region/Coronal Signatures of Penumbral Microjets: HI-C, SDO/AIA and Hinode (SOT/FG) Observations  
5:00 pm **Iain Hannah**, NuSTAR’s First Solar Observations: Search for a high energy X-ray component to the “non-flaring” Sun  
5:15 pm **Mark Weber**, A Revolution in DEM Analysis with Application to Nanoflare Heating  
5:30 pm **Scott McIntosh**, Deciphering Solar Magnetic Activity: On the Relationship Between the Sunspot Cycle and the Evolution of Small Magnetic Features  
5:50 pm **Open Discussion**

4:15 pm – 6:00 pm **Splinter Session S-3 (2b). From the Sun to Earth: Turbulence and wave-particle interactions at the Sun, at the Earth, and in the solar wind**  
(Willamette Ballroom – Hawthorne/Sellwood, Level 1)  
**Session Co-Chairs:** Chadi Salem and Marc Pulpupa, SSL, Univ. of California - Berkeley  
4:35 pm **Andrew Hillier**, Investigating Prominence Turbulence with Hinode SOT Dopplergrams  
4:55 pm **Phil Isenberg**, Ion Kinetics in the Solar Wind Generation Region  
5:15 pm **Chadi Salem**, Kinetic Scale Turbulence in the Solar Wind: A review of current challenges  
5:35 pm **Allison Jaynes**, Simultaneous ULF Waves, Whistler-mode Chorus and Pulsating Aurora Observed by the Van Allen Probes and Ground-based Imagers  
5:55 pm **Open Discussion**
4:15 pm – 6:00 pm  **Splinter Session S-4 (4b).  Space Weather Impacts using HSO Measurements (focus on observations)**  (Cascade Ballroom – Mt. Hood/Mt. St. Helens, Level 2)  
**Session Chair:** Andrew Jones, LASP, University of Colorado - Boulder  
4:15 pm  **Rodney Viereck, NOAA Space Weather Operations:** Current operational models and future needs for space weather modeling  
4:35 pm  **K. D. Leka, The Discriminant Analysis Flare Forecasting System ("DAFFS")**  
4:50 pm  **Paulett Liewer, Testing the Reliability of Far-side Active Region Predictions from Helioseismology using STEREO Far-side**  
5:05 pm  **Meng Jin, Global MHD Simulation of the CME on 2011 March 7: From Chromosphere to 1 AU**  
5:20 pm  **Ryan McGranaghan, Forecasting the Impact of Equinoctial High-Speed Stream Structures on Thermospheric Responses and an Extension to Solstitial Events**  
5:35 pm  **Open Discussion**  

4:15 pm – 6:00 pm  **Splinter Session S-5.  Hinode/IRIS: Flares (outside the context of CMEs)**  (Willamette Ballroom – Ross/Morrison, Level 1)  
**Session Chair:** Sabrina Savage, NASA Marshall Space Flight Center, Huntsville, AL  
4:15 pm  **Sarah Matthews, Probing Energy Release & Transport in Flares – New insights from IRIS and EIS**  
4:40 pm  **George Doschek, Testing the Standard Flare Model with Hinode/EIS, RHESSI, and SDO/AIA Data**  
4:55 pm  **Wei Liu, First High-resolution Spectroscopic Observations by IRIS of a Fast Prominence Eruption Associated with a CME on 2014-May-09**  
5:10 pm  **Fatima Rubio da Costa, IRIS Observations of Solar Flares in Comparison with Hybrid Particle and Radiative Transfer Hydrodynamic Simulations**  
5:25 pm  **Hui Tian, IRIS Observations of Magnetic Reconnection and Chromospheric Evaporation in a Solar Flare**  
5:40 pm  **Jean-Pierre Wuelser, IRIS Observations of Plasma Heating and Dynamics in a Well-Observed M-Class Flare**  
5:55 pm  **Open Discussion**  

6:30 pm – 8:00 pm  **IRIS Team Meeting**  (Willamette Ballroom – Hawthorne/Sellwood, Level 1)  

**Tuesday, Nov. 4**  

8:30 am – 10:15 am  **Splinter Session S-6 (2a).  Onset and Coronal Evolution of CMEs**  (Cascade Ballroom – Mt. Hood/Mt. St. Helens, Level 2)  
**Session Chair:** Alphonse Sterling, NASA Marshall Space Flight Center, Huntsville, AL  
8:30 am  **Ben Lynch, On the Initiation of Coronal Mass Ejections, Their Evolution, and Propagation into the Heliosphere: Recent progress and outstanding questions**  
8:50 am  **Jie Zhang, Observational Signatures of CME Initiation and Eruption: Does Flux Rope Exist Prior to the Eruption?**  
9:10 am  **Peter Schuck, Measuring Coronal Energy and Helicity Buildup with SDO/HMI**  
9:23 am  **Lucie Green, Flux Ropes: Observations of their evolution prior to eruption**  
9:36 am  **Kathy Reeves, Direct Observations of Reconnection Outflow and CME Triggering in a Small Solar Eruption Observed with IRIS, AIA and XRT**  
9:49 am  **Christina Kay, Using Deflections to Constrain the Mass of CMEs: The 12 December 2008 Case**  
10:02 am  **Open Discussion**
8:30 am – 10:15 am **Splinter Session S-7 (1b). Reconnection and Magnetic Instabilities in Geospace and Heliosphere** (Cascade Ballroom – 3 Sisters/Mt. Bachelor, Level 2)

**Session Chair:** Sabrina Savage, NASA Marshall Space Flight Center, Huntsville, AL

- 8:30 am *Noé Lugaz*, **Reconnection during CME Propagation and Interaction**
- 8:50 am *Spiro Antiochos*, **The Role of Interchange Reconnection in CMEs/Eruptive Flares**
- 9:05 am *Joachim Birn*, **Modeling Substorms in the Magnetotail**
- 9:25 am *Tim Bastian*, **EUV and Radio Observations of an Eruptive Magnetic Flux Rope and Fast CME**
- 9:40 am *Tamas Gombosi*, **End-toEnd Modeling of Space Weather Events with the Space Weather Modeling Framework**
- 9:55 am *Liang Wang*, **Integrating Kinetic Effects in Fluid Models for Magnetic Reconnection**
- 10:10 am **Open Discussion**


**Session Chair:** Rock Bush, Stanford University, Stanford, CA

- 8:30 am *Rudolf Komm*, **Solar Subsurface Characteristics and Solar Activity**
- 8:45 am *Yusuke Iida*, **Investigation of Surface Magnetic Flux Transport by use of Hinode/SOT and SDO/HMI**
- 9:00 am *Markus Aschwanden*, **Progress in Measuring Coronal Magnetic Fields and Energies**
- 9:15 am *Amir Caspi*, **Multi-Instrument Differential Emission Measure (DEM) of the Solar Corona**
- 9:30 am *Frank Eparvier*, **Sub-daily EUV Irradiance Variations**
- 9:45 am *Richard Mewaldt*, **Variations in the Properties of Solar Energetic Particle Events over Recent Solar Cycles**
- 10:00 am **Open Discussion**

8:30 am – 10:15 am **Splinter Session S-9 (3b). Energy Flow in the Magnetosphere** (Willamette Ballroom – Hawthorne/Sellwood, Level 1)

**Session Chair:** Phillip Chamberlin, NASA Goddard Space Flight Center, Greenbelt, MD

- 8:30 am *Jacob Bortnik*, **Understanding the Effects of Data-Driven Repetitive Chorus Elements on the Scattering Characteristics of Energetic Radiation Belt Electrons**
- 9:00 am *Oleksiy Agapitov*, **Formation of the "Seed" Population of 1-10 keV Electrons in the Outer Van Allen Radiation Belt by Time Domain electric Field Bursts**
- 9:30 am *David Malaspina*, **Nonlinear Electric Field Structures at Plasma Boundaries in the Inner Magnetosphere**
- 9:50 am *Delores Knipp*, **Mission View of Field Aligned Currents from NASA’s ST5 Spacecraft**
- 10:10 am **Open Discussion**

10:15 am – 10:45 am **Break**

10:45 am – 12:30 pm **Poster Session – P1/P2 (Monday/Tuesday group)** (Lloyd Center, Level 1)

(featured Topics 4a, 4b)

12:30 pm – 2:00 pm **Lunch (on your own)**
2:00 pm – 3:45 pm **Plenary Session 2a. Evolving Coronal Mass Ejections from Corona, through the Heliosphere, into Geospace**  
(Cascade Ballroom, Level 2)  
**Session Chair:** Mark Weber, Harvard-Smithsonian CfA, Cambridge, MA

- **2:00 pm** William Abbett, *Modeling the Convection Zone-to-Corona System over Global Spatial Scales*
- **2:20 pm** Cooper Downs, *Using Realistic MHD Models to Connect Observations of CMEs to Their Physical Underpinnings*
- **2:40 pm** Rebekah Evans (presented by Antonia Savcheva), *The Interaction of Solar Eruptions and Large-Scale Coronal Structures Revealed Through Modeling and Observational Analysis*
- **3:00 pm** Russ Howard, *Modeling of Coronal Mass Ejections*
- **3:20 pm** Mike Liemohn, *Nonlinear Magnetosphere-Ionosphere Coupling in Near-Earth Space During an ICME-Driven Storm*
- **3:40 pm** Open Discussion

3:45 pm – 4:15 pm **Break**

4:15 pm – 6:00 pm **Plenary Session 2b. Dynamics of Energetic Particles, Wave-Particle Interactions, Shocks, Turbulence**  
(Cascade Ballroom, Level 2)  
**Session Chair:** David Malaspina, LASP, University of Colorado - Boulder

- **4:15 pm** Homa Karimabadi (presented by Vadim Roytershteyn), *Recent Results on Kinetic Simulations of Shocks and Turbulence*
- **4:40 pm** David Lario, *Multi-Spacecraft View of Solar Energetic Particle Events in Solar Cycle 24*
- **5:05 pm** Lynn Wilson III, *Collisionless Shock Waves and Wave-Particle Interactions*
- **5:30 pm** Open Discussion

6:30 pm – 8:00 pm **XRT Team Meeting**  
(Willamette Ballroom – Morrison, Level 1)

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**Wednesday, Nov. 5**

8:00 am – 9:45 am **Splinter Session S-11 (3a). Chromosphere: Dynamics, heating and ion-neutral effects**  
(Willamette Ballroom – Ross/Morrison, Level 1)  
**Session Chair:** Bart De Pontieu, Lockheed Martin, SAL, Palo Alto, CA

- **8:00 am** James Leake, *The Role of the Chromosphere in the Energization of the Corona*
- **8:25 am** Tetsu Anan, *Observation of Velocity Differences between Neutral Atoms and Ions in Solar Chromosphere*
- **8:40 am** Gregal Vissers, *On the IRIS Signature of Ellerman Bombs*
- **8:55 am** Nicholas Murphy, *Asymmetric Magnetic Reconnection in Partially Ionized Chromospheric Plasmas*
- **9:10 am** Luc Rouppe van der Voort, *Torsional Motions and Heating in the Disk Counterparts of Spicules*
- **9:25 am** Hsiao-Hsuan Lin, *Formation of the O I 135.56 nm and the C I 135.58 nm Lines*
- **9:40 am** Open Discussion
8:00 am – 9:45 am  **Splinter Session S-12 (1b).**  *Reconnection and Magnetic Instabilities in Solar Atmosphere*  
(Cascade Ballroom – 3 Sisters/Mt. Bachelor, Level 2)

**Session Chair:** Spiro Antiochos, NASA Goddard Space Flight Center, Greenbelt, MD

- 8:00 am  **Shin Toriumi,** Magnetic Reconnection in Emerging Active Regions
- 8:20 am  **Wei Liu,** Correlated Quasi-periodic Fast-mode Magnetosonic Wave Trains and Flare Pulsations: Implications for Pulsed Magnetic Reconnection in the Solar Corona
- 8:35 am  **Maria Madjarska,** IRIS Sub-Arcsecond Scale Observations of an Explosive Event
- 8:50 am  **Tibor Török,** What Can We Learn from MHD Simulations and Observations about the Initial Phase of Solar Eruptions?
- 9:10 am  **Alphonse Sterling,** Miniature Filament Eruptions and their Reconnections in X-Ray Jets: Evidence for a new paradigm
- 9:25 am  **Neal Hurlburt,** A Study of Eruptions Detected by the LMSAL Eruption Patrol
- 9:40 am  **Open Discussion**

8:00 am – 9:45 am  **Splinter Session S-13 (4a).**  *Effects of Solar Variability at Earth*  
(Cascade Ballroom – Mt. Hood/Mt. St. Helens, Level 2)

**Session Chair:** Frank Eparvier, LASP, University of Colorado - Boulder

- 8:00 am  **Stan Solomon,** Solar Variability Impacts on Thermosphere-Ionosphere Weather and Climate
- 8:13 am  **Leonid Didkovsky,** How Consistent are the Solar Absolute Irradiance Changes for the Two Latest Solar Cycle Minima with the SOHO/EIT and SDO/AIA Image Spatial Spectra and with the CODE TEC Sectorial Harmonic Spectra Changes
- 8:26 am  **Liying Qian,** Solar Flare Effects in the Thermosphere and the Ionosphere
- 8:46 am  **Jan Sojka,** Progress in Resolving X-Class Flare E-Region Issues
- 8:59 am  **Scott Bailey,** Influence of Solar Flare Irradiance on Nitric Oxide in the Lower Thermosphere and Ionosphere
- 9:12 am  **Justin Yonker,** Contribution of Solar Irradiance to Ionospheric and Odd Nitrogen Chemistry
- 9:25 am  **Katharine Duderstadt** (presented by **Harlan Spence**), Exploring Extreme Solar Proton Events, Their Possible Atmospheric Impacts, and Potential Paleoclimatic Signatures

8:00 am – 9:45 am  **Splinter Session S-14 (2b).**  *Shocks, Waves, and Turbulence: Heliospheric particle acceleration mechanisms*  
(Willamette Ballroom – Hawthorne/Sellwood, Level 1)

**Session Chair:** Marco Velli, NASA Jet Propulsion Laboratory, Pasadena, CA

- 8:00 am  **Rob Decker,** Particle Acceleration at Shocks at 1 AU and Beyond
- 8:20 am  **John Wygant,** Van Allen Probe Observations of Electric Fields and Their Role in the Dynamics of the Inner Magnetosphere of the Earth and Energetic Particle Acceleration
- 8:40 am  **Wen Li,** Understanding Earth’s Radiation Belt Electron Dynamics and its Relation to Solar Wind Conditions
- 9:00 am  **Alexa Halford,** BARREL Observations of a Solar Storm: The Flare, The SEP, and the CME arrival at Earth
- 9:15 am  **David Long,** The Energetics of a Global Shock Wave in the Low Solar Corona
- 9:30 am  **Open Discussion**

9:45 am – 10:15 am  **Break**

10:15 am – 12:00 pm  **Poster Session – P3/P4 (Wednesday/Thursday group)**  
(Lloyd Center, Level 1)

(featured Topics 1a, 1b)
10:15 am – 12:00 pm **Splinter Session S-15. Hinode/IRIS: Spectroscopic Mass and Energy Transfer between the Chromosphere and Corona**  
(Cascade Ballroom – 3 Sisters/ Mt. Bachelor, Level 2)  
**Session Chair:** Jonathan Cirtain, NASA Marshall Space Flight Center, Huntsville, AL  
10:15 am **Joten Okamoto,** *IRIS-Hinode Collaborative Observations of Oscillating Prominences and Discovery of Resonant Absorption*  
10:40 am **Patrick Antolin,** *The Multi-Thermal and Multi-Strand Nature of Coronal Rain*  
10:55 am **Sean Brannon,** *Using IRIS to Constrain Flare Loop Properties in Simulations of Impulsive Conduction-Driven Evaporation*  
11:10 am **Deborah Baker,** *Challenging the FIP Bias Paradigm?*  
11:25 am **Chad Madsen,** *Investigating the Nature of Running Sunspot Waves with the Interface Region Imaging Spectrograph*  
11:40 am **Paola Testa,** *Evidence of Non-Thermal Particles in Coronal Loops Heated Impulsively by Nanoflares*  
11:55 am **Open Discussion**  

12:15 pm – 1:15 pm **HMI Vector Field Forum**  
(Lloyd Center – Weidler/Halsey)  
*Bring your lunch! Stop by and chat with HMI team members for the latest updates on the vector magnetic field data.*

12:00 pm – 1:30 pm **Lunch (on your own)**

1:30 pm – 3:15 pm **Plenary Session 3a. Ion-Neutral Interactions within Earth’s Atmosphere and the Solar Atmosphere**  
(Cascade Ballroom, Level 2)  
**Session Chair:** Bart De Pontieu, Lockheed Martin, SAL, Palo Alto, CA  
1:30 pm **Mats Carlsson,** *Heating Requirements of the Solar Chromosphere*  
1:55 pm **Juan Martinez-Sykora,** *Numerical Simulations of Ion-Neutral Interaction Effects in the Solar Chromosphere*  
2:20 pm **Wenbin Wang,** *How Does the Sun Drive the Dynamics of the Earth’s Thermosphere and Ionosphere*  
2:45 pm Richard Eastes (presented by **Stan Solomon**), *Observing Earth’s Response to Solar Variability with the GOLD Mission*  
3:10 pm **Open Discussion**

3:15 pm – 3:45 pm **Break**

3:45 pm – 5:30 pm **Plenary Session 3b. Heliosphere-Magnetosphere Interactions from Bowshock to Geotail**  
(Cascade Ballroom, Level 2)  
**Session Chair:** Jacob Bortnik, University of California - Los Angeles  
3:45 pm **Drew Turner,** *An Overview of Transient Ion Foreshock Phenomena and their Impacts on Earth’s Magnetosphere*  
4:10 pm **Tai Phan,** *Ion and Electron Bulk Heating in Magnetic Reconnection: Dependence on the Inflow Alfvén Speed and Magnetic Shear Angle*  
4:35 pm **Scot Elkington,** *Energy Transfer from the Heliosphere and the Dynamics of the Van Allen Radiation Belts*  
5:00 pm **Geoff Reeves,** *The Complex Structure and Dynamics of the Inner Magnetosphere as Revealed by the Van Allen Probes Mission*  
5:25 pm **Open Discussion**

6:30 pm – 8:00 pm **Networking Event / Student Awards**  
*Oregon Museum of Science & Industry (OMSI)*
Thursday, Nov. 6

8:00 am – 9:45 am  **Plenary Session 4a. Origins of Solar Magnetic Fields, Variability, and Effects at Earth**  
(Cascade Ballroom, Level 2)  
**Session Co-Chairs:** Allison Jaynes, LASP, University of Colorado, Boulder, CO; and Carrie Black, NASA Goddard Space Flight Center  
8:00 am  **Takashi Sekii,** *Helioseismic Studies of Solar Dynamics*  
8:20 am  **Harry Warren,** *Empirical, Semi-Empirical, and Physical Models of Solar Irradiance Variability*  
8:40 am  **Janet Luhmann,** *Toward Connecting the Sun-to-Earth Picture: What we can do today*  
9:00 am  **Sasha Ukhorskiy,** *Global Variability of the Outer Radiation Belt: Highlights from Van Allen Probes*  
9:20 am  **Cora Randall,** *Solar Influences on the Earth’s Atmosphere*  
9:40 am  Open Discussion  

9:45 am – 10:15 am  **Break**  

10:15 am – 12:00 pm  **Plenary Session 4b. Modeling and Forecasting Space Climate and Space Weather Events**  
(Cascade Ballroom, Level 2)  
**Session Chair:** Todd Hoeksema, Stanford University, Stanford, CA  
10:15 am  **Jeff Newmark,** *NASA Heliophysics System Observatory (HSO)*  
10:45 am  Panel Discussion: *Using HSO to Improve Data-Driven Modeling in Heliophysics*  
**Panel Members:** Karel Schrijver, Nathan Schwadron, Kanya Kusano, Tamas Gombosi, K. D. Leka  

12:00 pm – 1:00 pm  **Lunch (on your own)**  

1:00 pm – 2:45 pm  **Poster Session – P3/P4 (Wednesday/Thursday group)**  
(Lloyd Center, Level 1)  
(featuring Topics 3a, 3b)  

1:00 pm – 2:45 pm  **Splinter Session S-16 (1a). Magnetic Energy and Field in the Heliosphere (Part I)**  
(Cascade Ballroom – 3 Sisters/Mt. Bachelor, Level 2)  
**Session Chair:** Marco Velli, NASA Jet Propulsion Laboratory, Pasadena, CA  
1:00 pm  **Franco Rappazzo,** *Equilibria, Current Sheet Formation and Heating of the Magnetically Confined Corona*  
1:20 pm  **Olga Panasenco,** *Magnetic Nature of Prominences and CMEs at Different Scales Throughout the Cycle*  
1:40 pm  **James Spann,** *On Remotely Measuring the Interplanetary Magnetic Field*  
1:55 pm  **Leif Svalgaard,** *The Heliomagnetic Field 1835-2014*  
2:10 pm  **Ilpo Virtanen,** *Magnetic Flux Density in the Inner and Outer Heliosphere*  
2:25 pm  **Merav Opher,** *The Magnetic Field in the Outer Heliosphere*  

2:45 pm – 3:15 pm  **Break**
3:15 pm – 5:00 pm  **Splinter Session S-17 (2a). Evolution of Coronal Mass Ejections through the Heliosphere into Geospace**  (Cascade Ballroom – Mt. Hood/Mt. St. Helens, Level 2)

**Session Chair:** Paullett Liewer, NASA Jet Propulsion Laboratory, Pasadena, CA

3:15 pm  **Robin Colaninno,**  Propagation and Evolution of Coronal Mass Ejections in the Heliosphere; the STEREO-era

3:35 pm  **Nat Gopalswamy,**  Earth-Affecting Coronal Mass Ejections

3:55 pm  **Christina Cohen,**  Recent Results on the Longitudinal Distribution of Solar Energetic Particles in the Heliosphere

4:15 pm  Melissa Pesce-Rollins (presented by Wei Liu),  Gamma-rays, EUV Wave (Shock), and SEPs Associated with the M1.5 Behind-the-limb Flare on 2013-Oct-11

4:30 pm  **Ailsa Prise,**  Tracking a coronal mass ejection and co-rotating interaction region as they travel from the Sun passing Venus, Earth, Mars and Saturn

4:45 pm  **Yuan-Kuen Ko,**  The Internal Structure of ICME Ion Properties, Its Magnetic Structure and Associated Solar Eruption Sources

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3:15 pm – 5:00 pm  **Splinter Session S-18 (1a). Magnetic Energy and Field in the Heliosphere (Part II)**  (Cascade Ballroom – 3 Sisters/Mt. Bachelor, Level 2)

**Session Chair:** Phillip Chamberlin, NASA Goddard Space Flight Center, Greenbelt, MD

3:15 pm  **Feng Chen,**  Magnetic Field Lines and Coronal Loops – A Difficult Relation

3:30 pm  **Tilaye Tadesse Asfaw,**  First use of Synoptic Vector Magnetograms for Global Nonlinear Force-Free Coronal Magnetic Field Models

3:45 pm  **Mark Cheung,**  Thermal Diagnostics with SDO/AIA: Applying a Validated Method to Studying Eruptive Active Regions

4:00 pm  **Ineck De Moortel,**  Joint SDO/AIA and IRIS Observations of Propagating Coronal Disturbances

4:15 pm  **Alan Title,**  Flare Clustering

4:30 pm  **Hugh Hudson,**  Overview of the HMI Coronal Observations

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3:15 pm – 5:00 pm  **Splinter Session S-19 (3a). The Ionosphere: Dynamics, energetics and ion-neutral effects**  (Willamette Ballroom – Ross/Morrison, Level 1)

**Session Chair:** Stan Solomon, High Altitude Observatory, NCAR, Boulder, CO

3:15 pm  **Geoff Crowley,**  Plasma-Neutral Coupling in the Solar Chromosphere and Ionosphere/Thermosphere

3:33 pm  **Tom Immel,**  Search for the Drivers of Ionospheric Variability

3:51 pm  **Scott England,**  Atmospheric Wave Impacts on the Ionosphere via Multiple Coupling Pathways

4:09 pm  **Joe Huba,**  Impact of Tsunami-Generated Gravity Waves on the Ionosphere

4:27 pm  **Jonathan Krall,**  How the Thermosphere Shapes the Quiet-Time Plasmasphere

4:40 pm  **Lois Sarno-Smith,**  The Disappearance of the Post-Midnight High Energy Ion Plasmasphere

4:53 pm  **Open Discussion**
3:15 pm – 5:00 pm  **Splinter Session S-20. Hinode/IRIS: Origins of the Solar Wind**  
(Willamette Ballroom – Hawthorne/Sellwood, Level 1)  

**Session Chair:** Alphonse Sterling, NASA Marshall Space Flight Center, Huntsville, AL

3:15 pm  **Hui Tian,** *Prevalence of Micro-jets from the Network Structures of the Solar Transition Region and Chromosphere*

3:40 pm  **David Brooks,** *A Search for the Origin of the Slow Solar Wind using Full Sun Spectroscopic Observations from Hinode*

3:55 pm  **Chloe Guennou,** *Elemental Abundances of Plume and Interplume Regions: Identifying the coronal source of the fast solar wind*

4:10 pm  **Kyoung-Sun Lee,** *Determination of the Abundances of Polar Jets using Hinode/EIS and an Investigation of the Relationship with the Fast Solar Wind*

4:25 pm  **Len Culhane,** *Determining the Location of Open Magnetic Field Areas in Active Regions and their Potential as Sources of the Slow Solar Wind*

4:40 pm  **Scott McIntosh,** *Strong Blue Asymmetries in IRIS Line Profiles: Identifying Heliospheric Tributaries*

4:55 pm  **Open Discussion**

5:00 p.m.  **Adjourn**