

2011 SPD Program

Convention Center, Las Cruces, NM

June 6, 2011

Sunday, June 12

- 14:00 - 17:00, SPD Committee meeting (closed)
- 16:00 - 18:00, Student/Teacher/Scientists Outreach Event: NMSU Golf Course
- 18:30 - 21:30, Opening Reception: NMSU Golf Course

Monday, June 13

- 07:30 - 08:30, Breakfast/Poster viewing
- 08:30 - 09:20, **Parker Lecture 1: Abbett**, *Modeling the physical connection between the solar convection zone and corona*, (Chair: Alexander)

- 09:20 - 10:20, **Session 1: Instrumentation/Methods**, (Chair: Abramenko)

- * 09:20, Gary, *The Expanded Owens Valley Solar Array*
- * 09:35, Kaufmann, *Search of Continuum Solar Flare Radiation from GHz to THz Frequencies*
- * 09:50, Kellerer, *Adaptive Optics At The New Solar Telescope - Present, Future And Beyond*
- * 10:05, Davey, *The Virtual Solar Observatory at Eight and a Bit!*

- 10:20 - 11:00, Coffee & Posters
- 11:00 - 12:30, **Session 2: Solar Interior**, (Chair: Schou)
 - 11:00, Sturrock, *Helioradiology: A New View Of The Deep Solar Interior: Indications Of A Slowly Rotating Core And An Inner Tachocline*
 - 11:15, Pipin, *The Waldmeier Effect and Asymmetry of Solar Magnetic Cycles in a Surface-Shear Dynamo Model*

- 11:30, Hathaway, *The Sun's Meridional Circulation - not so Deep*
- 11:45, Baldner, *The Magnetic Fields of the Solar Interior*
- 12:00, Munoz-Jarmillo, *The Double-Ring Algorithm: Reconciling Surface Flux Transport Simulations and Kinematic Dynamo Models*
- 12:15, Weber, *The Rise of Active Region Flux Tubes in the Turbulent Solar Convective Envelope*

- 12:30 - 13:30, Lunch

- SPD E/PO lunch meeting (meet in the poster room)

- 13:40 - 15:40, **Session 3: Lower Atmosphere**, (Chair: Linton)

- 13:40, Balasubramaniam, *Analysis Of Sunspot Number Counts, Sunspot Area, And Sunspot Irradiance Deficit: 2002-2011*
- 13:55, Jaeggli, *An Observational Study of the Formation and Evolution of Sunspots*
- 14:10, Sainz Dalda, *Spectropolarimetric Study Of Sea-serpent Penumbra Filaments And A Naked Sunspot*
- 14:25, Burleigh, *The Observed Red Asymmetry in the Bisectors of the Chromospheric CaII 854.2 nm Line*
- 14:40, Schad, *High-Resolution He I Spectropolarimetry of Chromospheric Fibrils*
- 14:55, Kim, *Propagating Transverse Wave In A Spicule Observed By The Hinode SOT*
- 15:10, Fox, *Explosive Event Rates in He II from MOSES Data*
- 15:25, Kleint, *Spectropolarimetry Of The Footpoints Of A C-class Flare In The Chromosphere*

- 15:40 - 16:00, Coffee & Posters
- 16:00 - 18:00, **Session 4**
 - 16:00 - 16:50, **Special Lecture: Alan Stern**, *The coming next-gen reusable suborbital era: New capabilities for solar research* (Chair: Alexander)
 - 16:50 - 18:00, Poster viewing
- 19:00 - 20:00, **Public Lecture: D. Pesnell**, *The Many Colors of the Sun*, (Chair: McAteer), Atkinson Hall
- 20:00 - 22:00, SPD Business meeting, Atkinson Hall

Tuesday, June 14

- 07:30 - 08:30, Breakfast/Poster viewing
- 08:30 - 09:20, **Hale Prize Talk: H. Spruit**, *How the cycle does and does not work*, (Chair: Habbal)
 - 00:20 - 10:20, **Session 5: Upper Atmosphere I**, (Chair: Reeves)
 - * 09:20, Tarr, *Calculating Energy Storage Due to Topological Changes in Emerging Active Region NOAA AR11112*
 - * 09:35, Bradshaw, *Radiative Signatures of the Coronal Heating and Cooling Cycle*
 - * 09:50, Aschwanden, *Temperature Analysis of Coronal Loop Cross-Sections: Monolithic vs. Nanoflare Heating*
 - * 10:05, Long, *Wavefront Expansion and Dispersion of Coronal Bright Fronts*
- 10:20 - 11:00, Coffee & Posters
- 11:00 - 12:30, **Session 6: Big Bear Solar Observatory**, (Chair: Goode)
 - 11:00, Goode, *The New Solar Telescope in Big Bear*
 - 11:15, Yurchyshyn, *Utilizing NST Data To Look For Connection Between Photospheric Dynamics And Small-scale Chromospheric Activity*
 - 11:30, Abramenko, *New View on Quiet-Sun Photospheric Dynamics Offered by NST Data*

- 11:45, Lim, *NST and Photospheric Fine -scale Structures Indicating the Small Scale Flux Emergence in an Active Region*
- 12:00, Andic, *From Bright Points, Throughout The Substructures Of The Pore, To The Umbral Dots*
- 12:15, Cao, *Near-infrared Imaging Spectropolarimeter For The NST*
- 12:30 - 22:00, Lunch & Excursions

Wednesday, June 15

- 07:30 - 08:30, Breakfast/Poster viewing
- 08:30 - 09:20, **Parker Lecture 2: Pinsonneault**, *The solar-stellar connection in the precision stellar astrophysics era*, (Chair: Jackiewicz)
 - 09:20 - 10:20, **Session 7: Upper Atmosphere II**, (Chair: Bradshaw)
 - * 09:20, Foukal, *Dimming of the 17th Century Sun*
 - * 09:35, Bannasar, *Formation and Evolution of a Multi-Threaded Prominence with Different Heating Scenarios*
 - * 09:50, Tun, *Three-dimensional Mapping of the Lower Corona and Transition Region*
 - * 10:05, Krista, *The Evolution and Space Weather Effects of Solar Coronal Holes*
- 10:20 - 11:00, Coffee & Posters
- 11:00 - 12:30, **Session 8: Advanced Technology Solar Telescope**, (Chair: Keil)
 - 11:00, Rimmele, *The Advanced Technology Solar Telescope - Constructing The World's Largest Solar Telescope*
 - 11:15, Berger, *Filament and Prominence Research with the Advanced Technology Solar Telescope*
 - 11:30, McIntosh, *Coupling The Dynamics Of The Outer Atmosphere With ATST*
 - 11:45, Stein, *Magnetic Fields: Modeling And ATST Observations*
 - 12:00, Casini, *The Visible Spectro-Polarimeter (ViSP) for the ATST: Science Objectives and Design Concepts*

- 12:15, Schmidt, *The Visible Tunable Filter and the Science it will do*
- 12:30 - 13:30, Lunch
- 13:40 - 15:40, **Session 9: Solar Dynamics Observatory**, (Chair: Thompson)
 - 13:40, Scherrer, *SDO/HMI - The First Year*
 - 13:55, Hock, *First Year Of Science Results From Solar Dynamics Observatory (SDO) Extreme Ultraviolet Variability Experiment (EVE)*
 - 14:10, Glesener, *Energetics And Heating In A Solar Plasma Ejection Observed By RHESSI And AIA*
 - 14:25, Sterling, *Insights into Filament Eruption Onset from Solar Dynamics Observatory Observations*
 - 14:40, Zhang, *CME Cavity, Core And Flux Rope: New Insights From Sdo And Stereo Observations*
 - 14:55, Liu, *SDO/AIA Observations of a Global EUV Disturbance Traveling into a Coronal Cavity and Its Subsequent Oscillations: New Evidence of Fast Mode MHD Waves*
 - 15:10, Vourlidas, *EUUV Imaging Of Shock Formation In The Low Corona With SDO/AIA*
 - 15:25, Torok, *3d MHD Simulation Of Sympathetic Eruptions on 1 August 2010*
- 15:40 - 16:00, Coffee & Posters
- 16:00 - 16:50, **Harvey Prize Talk: Rempel**, *Numerical Simulations of Sunspots: From the Scale of Fine Structure to the Scale of Active Regions*, (Chair: Habbal)
- 16:50 - 17:30, Poster viewing
- 17:30 - 22:30, Banquet, Farm and Ranch Museum
- 09:20 - 10:20, **Session 10: Flares I**, (Chair: Qiu)
 - * 09:20, Share, *Impulsive High-Energy Particle Acceleration in the SOL2010-06-12T00:57 M2 X-ray Flare*
 - * 09:35, Petrosian, *Fermi-LAT Observation of > 100 MeV Gamma-rays Of March 7-8, 2011 Solar Flares*
 - * 09:50, Longcope, *The Origin Of High Density In Loop-top X-ray Sources*
 - * 10:05, Ishikawa, *On the Relation of Above-the-loop-top and Footpoint Hard X-ray Sources in Solar Flares*
- 10:20 - 11:00, Coffee & Posters
- 11:00 - 12:30, **Session 11: Flares II**, (Chair: McKenzie)
 - 11:00, Watson, *The Magnetic and Dynamic Properties of Flaring Active Regions*
 - 11:15, Christie, *The Flare Productivity of Active Regions*
 - 11:30, Fleischman, *Detection of the Acceleration Site in a Solar Flare*
 - 11:45, Inglis, *Pulsations In Two-ribbon Flares: Waves, Reconnection Or Both?*
 - 12:00, Qiu, *Heating of Flare Loops During a Two-ribbon Flare on 2005 May 13*
 - 12:15, Raulin, *The Time-Extended Phase of Solar Flares at MM-SUBMM Wavelengths*
- 12:30 - 13:30, Lunch
- 13:40 - 15:40, **Session 12: CMEs**, (Chair: Reinard)
 - 13:40, Olmedo, *Partial Torus Instability in Initiating Coronal Mass Ejections*
 - 13:55, Antiochos, *CME Onset And Take-off*
 - 14:10, Fan, *An MHD Model of the December 13 2006 Eruptive Flare*
 - 14:25, Ma, *Dynamics of Coronal Mass Ejection Origins*
 - 14:40, Habbal, *The Coronal Imprints of Eruptive Prominences and CMEs as Revealed by the Total Solar Eclipse Observations of 11 July 2010*
 - 14:55, Murphy, *Plasma Heating During a Coronal Mass Ejection Observed by SOHO*

Thursday, June 16

- 07:30 - 08:30, Breakfast/Poster viewing
- 08:30 - 09:20, **Parker Lecture 3: Karpen**, *Prominences: the key to understanding solar activity*, (Chair: Habbal)

- 15:10, White, *Simultaneous Observations of H α ; Moreton Waves and EUV Waves*
- 15:25, Howard, *The Evolution Of Coronal Mass Ejections And Large Solar Wind Structures*
- 15:40 - 16:00, Coffee & Posters
- 16:00 - 17:30, **Session 13: Solar Wind, SEPs, and the Heliosphere**, (Chair: de Nolfo)
 - 16:00, Jackson, *The 3D Reconstruction of Heliospheric Density Using Thomson-Scattering Observations - Current Progress and Future Prospects*
 - 16:15, DeForest, *Imaging The Solar Wind At 1 AU with Stereo/hi-2*
 - 16:30, Masson, *Interchange Slip-running Reconnection and Sweeping SEP Beams*
 - 16:45, van der Holst, *A Two-temperature Solar Wind Model: Validation And Two-temperature CMEs*
 - 17:00, Linker, *Magnetohydrodynamic Modeling of the Origin and Evolution of Corotating Interaction Regions*
 - 17:15, Park, *Dependence Of Solar Proton Events On Flare And Cme Parameters*