

2008 SHINE WORKSHOP

POSTERS

GEM-SHINE Sessions:

GS1- Comparing the Properties of Magnetic Reconnection in Various Environments (Gosling / Hesse)

GS1-01- Magnetic Reconnection in the Solar Wind, at the Magnetopause of the Earth and Planets and in Planetary Magnetotails (Russel)

GS1-02- The Importance of the Hall Effect in Magnetic Reconnection: Comparisons of Hybrid and Hall-less Hybrid (Malakit)

GS1-03- Particle Acceleration by Magnetic Reconnection in the Earth's Distant Magnetotail and in Solar Flares (Lin)

GS1-04- Signatures of Magnetic Reconnection from Voyagers 1 and 2 (Stevens)

GS1-05- Reconnection in Solar Eruptions and Magnetospheric Substorms

GS2 - Creation and Propagation of CMEs and Plasmoids: Loss of Equilibrium and Subsequent Evolution (Reeves / Birn)

GS2-01- Breakout trigger due to peaking of strapping field with altitude (Bellan)

GS2-02- Transport in the Interplanetary Medium of Coronal Mass Ejections (Borgazzi)

GS2-03- A Comparison of the Formation and Evolution of Magnetic Flux Ropes in Solar Coronal Mass Ejections (Linton)

GS2-04- Plasma Flow Features in Current Sheets: Comparisons of Solar and Terrestrial Contexts

GS2-05- Substorms and CMEs: A Search for a Common Onset Mechanism (Siscoe)

GS3 - Is there a Need for More-Detailed Solar-Wind Models (Arge / McPherron)

GS3-01- Demonstrations that the Solar Wind is Not Accelerated by Waves (Roberts)

GS3- 02- Comparison of BATS-R-US model runs of Oct. 25th, 2000 Halo CME using inputs from ENLIL with Cone Model and ACE observations (Cartwright)

GS4- Multiple-Dip Geomagnetic Storms: Solar-Wind Drivers or Internal Magnetospheric Processes (Richardson/Jordanova)

GS4-01- Geo-effective Sheaths in Intense Multiple-dip Geomagnetic Storms: Solar-Heliospheric and Space Weather Perspectives (Lugaz)

GS4-02- The Interplanetary Drivers of Multi-step Geomagnetic Storms (Richardson)

GS4-03- Statistical Results on Multiple-Dips of Intense Geomagnetic Storms and Their Interplanetary Causes (Zhang)

GS5- Perpendicular Ion Heating: observations at Earth and theory at the Sun (Chandran / Lysak)

GS5-01- Heating and Accelerating the Solar Wind (Russel)

GS5-02- Kinetic dissipation and anisotropic heating in a turbulent collisionless plasma (Parashar)

GS5-03- UVCS Empirical Constraints on Theoretical Models of Perpendicular Ion Heating at the Sun (Kohl)

GS6- SEPs from Heliosphere to Magnetosphere (Luhmann / Hudson)

GS6-01- Effects of Interplanetary Transport on the Interpretation of Solar Energetic Particle Spectra and Composition (Chollet)

GS6-02- Modeling the Transport of Solar Energetic Particles to 1 AU (Ruffolo)

GS6-03- Particle intensities above the streaming limit (Lario)

GS6-04- The effect of SEP events associated with CMEs and Flares on Geomagnetic Storms (Kaur)

GS7- Small-Scale Structure in the Solar Wind and Its Effect on Earth (Borovsky / Lavraud)

GS7-01- Multisatellite Observations of Interplanetary Field Enhancements (Russel)

GS7-02- X-ray Luminosity from Flaring Active Regions and Related Solar Wind Power (Korreck)

GS7-03- Small scale structures at Earth's foreshock : Waves and cavities (Blanco-Cano)

GS8- What Determines When Reconnection Turns On? Chromosphere, Corona, Solar Wind, Magnetopause, and Magnetotail (Antiochus / Shay)

GS8- 01- What Determines when Reconnection Turns on in the Solar Wind, at a Magnetopause and in a Magnetotail (Russel)

GS8-02- What Determines When Reconnection Turns On in CME Eruptions? (Moore)

GS8-03- Onset of Substorms and Flares/CMEs: Role of Reconnection and Secondary Instabilities (Bhattacharjee)

GS8-04- Theory of Three-Dimensional Interchange Reconnection in Coronal Hole Dynamics (Edmondson)

GS8-05- The Catastrophic Onset of Magnetic Reconnection in Solar and Stellar Coronae due to Two-Fluid Effects: Theory and Observations (Cassak)

GS8-06- The Weibel Instability in Electron-Positron Plasma Magnetic Reconnection (Liu)

GS8-07- Non-Linear Whistler Waves in Magnetic Reconnection (Schoeffler)

SHINE Sessions:

S1- Campaign Event: 5-14 December 2006 (Mulligan / Hu)

S01-01- A Comprehensive View of the 13 December 2006 CME: From the Sun to Interplanetary Space (Liu)

S01-02- Solar Energetic Particle Spectrum on 13 December 2006 Determined by IceTop (Evenson)

S01-03- Solar Magnetic Field Underlying the Energetic Eruptions in December 2006 (Li)

S01-04- Relativistic Solar Protons on 2005 January 20 and 2006 December 13 (Ruffolo)

S01-05- Modeling the December 13, 2006 SEP event with the PATH model (Verkhoglyadova)

S01-06- Multiple Spacecraft View of the Solar Energetic Particle Event of December 14, 2006 (Richardson)

S01-07- The Large SEP Events of December 2006 (Cohen)

S01-08- SOHO/ERNE observations of the 13 and 14 December, 2006, SEP events (Makela)

S01-09- The December 2006 Solar Energetic Particle Events: Unusual Signatures within an Interplanetary Coronal Mass Ejection (Mulligan)

S01-10- The December 2006 SEP Events at High Heliospheric Latitudes: the KET/Ulysses Observations (Struminsky)

S02- CME Dynamics - What are EUV Waves? (Vourlidas / Roussev)

S02-01- Studying EUV Emission in Realistic Flare-CME Environments (Downs)

S02-02- Evidence of Coupled Large-scale Propagating MHD Waves in the EUV Corona (Wills-Davey)

S02-03- STEREO Observations of EUV Waves (Patsourakos)

S02-04- Are EIT Waves Really Waves? (Linker)

S02-05- Transport in the Interplanetary Medium of Coronal Mass Ejections (Borgazzi)

S03- Hard X-rays and Particle Acceleration in Flares (Krücker)

S03-01- Observational and Theoretical Interpretation of Energetic Particle Transport in Solar Flares (Daou)

S03-02- Long term non-thermal emission of solar flares and the Neupert effect (Struminsky)

S03-03- Hard X-rays, flares, and particle acceleration (Aschwanden)

S03-04- Hard X-ray Emission from the Solar Corona (Hudson)

S03-05- Hard X-ray Emission In Kinking Filaments (Liu)

S04- Heliospheric Plasma Sheet (Ian Richardson / Vourlidas)

S04-01- 3D flux and pressure pileup, and magnetic reconnection during current sheet formation (Sun)

S04-02- Initiation and evolution of CMEs from helmet streamers (Liu)

S04-03- Multi-Spacecraft Observations: Heliospheric Plasma Sheet during Solar Minimum (Jian)

S04-04- Small-scale transients in the slow solar wind during solar activity minimum (Huttunen)

S04-05- Small Coronal Mass Outflows in coronagraphic data (Robbrecht)

S04-06- Heliospheric evolution and plasma properties of small-scale flux ropes in the solar wind (Cartwright)

S05- Impulsive ³He-rich and Electron Events (Haggerty / Krücker)

S05-01- High-energy Elemental, Isotopic, and Charge-State Composition in ³He-rich Solar Energetic Particle Events (Weidenbeck)

S05-02- The Origin of Low Energy ³He (de Nolfo)

S05-03- Energetic Electrons in ³He Enhanced Solar Energetic Particle Events (Ho)

S05-04- The Pitch-Angle Distribution Width Between 100 eV to 100 keV During the Solar Electron Burst of 22 March 2002 (de Koning)

S05-05- ³He events and the Solar Neutron Connection (Ryan)

S05-06- Solar Sources of ³He-rich Solar Energetic Particle Events (Nitta)

S05-07- Characteristics of Flares and CMEs Associated with SEP events (Cane)

S06- Introduction to Community Models (Linker / Abbett)

S06-01- Heliospheric Simulations by ENLIL (Odstrcil)

S06-02- The UCSD Solar Mass Ejection Imager (SMEI) and Interplanetary Scintillation (IPS) Web Database (Jackson)

S06-03- Using the WSA Coronal and Solar Wind Model (Arge)

S06-04- Study of Halo CME propagation to the L1 point using combined WSA-ENLIL models (Taktakishvili)

S07- Modeling a “Simple” CME from its Eruption to its Interplanetary Propagation out past Earth: The May 13, 2005 Event (Arge)

S07-01- An Observational Overview of the 2005 May 13 Campaign Event (Gopalswamy)

S07-02- The Ambient Solar Wind's Effect on ICME Transit Time (Case)

S07-03- Modeling and prediction of the May 13 2005 event (Xie)

S07-04- SHINE campaign event modeling: May,13,2005, from the Sun to the Earth (Sokolov)

S07-05- Simulating the May 13, 2005 CME Event (Mikic)

S08- Origin of the Structure in the Solar Wind (Borovsky / Arge)

S08-01- Relationship of Interplanetary Shock Micro and Macro Characteristics: A Wind Study (Szabo)

S08-02- Periodic Solar Wind Number Density Structures: their inherent length-scales, how they affect Earth's magnetosphere, and their possible source (Viall)

S08-03- Galactic Cosmic Ray Modulation by Small-Scale Features in the Interplanetary Medium (Jordan)

S08-04- Spatial Structure of Solar Electron Bursts and Filamentary Solar Wind (Steinberg)

S08-05- Investigation Of The Weak Polar Magnetic Fields During The Recent Decline Phase of Solar Cycle 23 (Lee)

S08-06- Development of solar wind model driven by empirical heat flux (Selwa)

S08-07- Intermittent MHD structures and solar wind discontinuities (Matthaeus)

S08-08- A survey of periodicities in the solar wind observed by Ulysses (Henderson)

S09- Radio Observations of Electrons from the Corona to the Magnetosphere (Kasper / Haggerty)

S09-01- Multi-Spacecraft EUV Tomography and 3D DEM (Frazin)

S09-02- Coronal Magnetic Field Properties from MHD Wave Observations with Faraday Rotation (Jensen)

S09-03- On Modeling Scintillation from First Principles (Jensen)

S09-04- Coronal Hard X-ray Emission Associated with Radio Type III Bursts (Krucker)

S10- Relationships between Flares and CMEs (Lynch / McTiernan)

S10-01- The Effects of Coronal Dimming Region Dynamics on CME Trajectories (Sechler)

S10-02- The CME-Flare Relationship on the Computer (Torok)

S10-03- What can flares tell us about CME properties? (Reinard)

S10-04- Theoretical Predictions of Energy Release in CMEs and Calculations of Flare Emissions (Reeves)

S10-05- ON THE FEASIBILITY OF A 3D BIPOLAR BREAKOUT CME IN THE SOLAR WIND (van der Holst)

S10-06- A Study of the Sympathetic Flare and CME Event on 2005 September 13 (Liu)

S10-07- The Source Region of Coronal Mass Ejections (Lara)

S10-08- Comparison of Fast and Slow Magnetic Breakout Eruptions (Lynch)

S10-09- Relationships between flares and CMEs (Hudson)

S10-10- Hard X-ray Emissions from the High Corona Associated with CMEs (Krucker)

S11- The Magnetic and Energetic Connection Between the Solar Convection Zone and the Corona (Abbett)

S11-01- The Twist Limit for Bipolar Active Regions (Moore)

S11-02- Photospheric Magnetic Evolution & Its Coronal Implications (Welsch)

S11-03- The “Main Sequence” of Explosive Solar Active Regions (Falconer)

S11-04- Asymmetry of helicity flux injected by leading and following polarities (Tian)

S11-05- Eruption of a coronal flux rope triggered by flux emergence (Torok)

S11-06- The role of strong magnetic fields in coronal helicity injection (Tian)

S11-07- Properties of Coronal Alfvén Waves (Tomczyk)

S11-08- A New Concept for the Long-Term Build-up to CMEs (Martin)

S11-09- A magnetic charge topology (MCT) model for two active regions observed by Hinode/XRT and TRACE (Lee)

S11-10- An Example of the Long-term Build-up to a CME (Panasenco)

S11-11- New Views of the Chromosphere from Hinode and 3D Radiative MHD Simulations (De Pontieu)

S12- The Prediction, Emergence, and Consequence of Large Active Regions (Rast)

S12-01- Evolution of Spinning and Braiding Helicity in an Emerging Active Region (Belur)

S12-02- Modeling the subsurface evolution of emerging active region flux tubes (Fan)

S12-03- Observational properties of large active regions and consequences of their appearance (Leka)

S12-04- Helioseismic clues to the prediction, emergence, and consequences of large active regions (Hill)

S13- The Theory of Suprathermal Particle Acceleration (Hill / Giacalone)

S13-01- Solar Wind and Pick-up Ion Acceleration at an Interplanetary Shock (Summerlin)

S13-02- Preliminary Results on Shock-Associated Energetic Particle Events with Focus on Seed Populations (Smith)

S13-03- The Excitation of Magnetic Waves by Solar Energetic Particle Populations (Smith)

S13-04- Automated Detection and Analysis of Interplanetary Shocks (Vorotnikov)

S13-05- Hybrid Plasma Simulation of the Heliospheric Termination Shock (Wu)

S13-06- Suprathermal Tail Observations from the STICS Instrument on the WIND Spacecraft (Gruesbeck)

S13-07- Ion acceleration during magnetic reconnection (Drake)

S13-08- Elemental Composition and Spectral Properties of the Quiet-Time Suprathermal Heavy Ion Population during Solar Cycle 23 (Al Dayeh)

S13-09- Oblique CME-driven Shocks: SEPs, and Upstream and Downstream Waves (Varban)

S13-10- Evidence for a Multi-stage Acceleration Process for Interplanetary Suprathermal He⁺ and He⁺⁺ (Hill)

S13-11- Particle Acceleration in the Heliosphere from the Inside Out (Schwadron)

S13-12- Observations of Suprathermal Tails in the Heliosphere and Heliosheath (Gloeckler)

S13-13- The $\approx v^{-5}$ Ion Spectrum in the Solar Wind (Jokipii)

S14- Turbulence in the Solar Wind (Chandran / Giacalone)

S14-01- Solar-wind Turbulence and Discontinuities (Vasquez)

S14-02- Short wavelength fluctuations in the solar wind (Bale)

S14-03- Role of Kinetic Alfvén Waves in Solar Wind Turbulence Spectrum (Sharma)

S14-04- Perpendicular Transport of Energetic Charged Particles in Nonaxisymmetric Two-Component Magnetic Turbulence (Ruffolo)

S14-05- Mirror-Mode Genesis: Lessons from STEREO (Russel)

S14-06- Observational Constraints for Solar Wind Turbulence (Smith)

S14-07- Power Spectrum Anisotropy for Interplanetary Fluctuations Inside 1 AU (Tessein)

S14-08- STEREO Observations of Strong Ion Cyclotron Waves in the Solar Wind near 1 AU (Jian)

S14-09- On the propagation of energetic particles in interplanetary magnetic turbulence (Guo)

S14-10- Kinetic Simulations of the Dissipation Range of Solar Wind Turbulence (Howes)

S14-11- Anomalous Scaling and Intermittency Effects in Solar Wind MHD Turbulence (Salem)

S14-12- Low frequency Waves Near Interplanetary Shocks observed by STEREO (Blanco-Cano)

S14-13- Some MHD and kinetic features of MHD cascade and dissipation in the solar wind (Matthaeus)

S14-14- Scaling of Energy Spectra and Implications for Ion Heating in the Turbulent Solar Wind (Bhattacharjee)

S14-15- On weak and strong magnetohydrodynamic turbulence (Boldyrev)

S14-16- Hot solar wind helium: direct evidence for local heating by Alfvén-cyclotron dissipation (Kasper)

S15- Understanding Prominence Mass (Gilbert / Alexander)

S15-01- Non-LTE radiative transfer (Labrosse)

S15-02- The Lyman-alpha line in active and eruptive solar prominences (Labrosse)

S15-03- Using Prominence Mass Inferences in Different Coronal Lines to Obtain the He/H Abundance (Gilbert)

S15-04- Properties of Prominence Mass Important in Modeling (Panasenco)

S15-05- Precursors to Quiet Sun Filament Eruptions (Kilper)

S15-06- On Asymmetric Eruptive Filaments (Liu)

S15-07- Prominence mass loading (Heinzl)

S16- Vector Magnetic Inputs to Global Models (Roussev / DeRosa)

S16-01- MDI/SOHO Level 1.8 Magnetograms (Liu)

S16-02- Vector Magnetic Fields from the Helioseismic and Magnetic Imager (HMI) Instrument (Tomczyk)

S16-03- Introduction to Using Full-Disk Vector Field Data for the SHINE Community (Leka)

S16-04- Observational Test of Potential Coronal Magnetic Field Model (Lin)

S17- What is the Acceleration Mechanism for Anomalous Cosmic Rays and Where is it Happening? (Cummings / Jokipii)

S17-01- STEREO ENA Observations show Evidence for the Acceleration of Pickup Ions at Termination shock (Wang)

S17-02- Oh ACRs, Where Art Thou? (Cummings)

S17-03- The Acceleration of ACRs in the Heliosheath (Fisk)

S17-04- Stochastic acceleration in the heliosheath: effect on anomalous cosmic ray spectra (Caballero-Lopez)

S17-05- Acceleration at a dynamic termination shock near a solar minimum (Florinsky)

S17-06- Voyager Observations at the Termination Shock and in the Heliosheath (Stone)

S17-07- Acceleration of ACRs at the Termination Shock (Kota)

S17-08- Particle Acceleration at the Blunt Termination Shock (Schwadron)

S17-09- A Possible Approach to the Acceleration of ACR at the Termination shock (Jokipii)

S17-10- Low-energy Ion Distributions at the Termination Shock (Decker)

S18- Where and How do Shocks Form in the Corona? (Opher / Vourlidas)

S18-01- CME-driven shocks: particle acceleration and plasma radiation (Schmidt)

S18-02- Alfvén Profile in the Lower Corona: Implications for Shock Formation (Evans)

S18-03- 50 Years Later: Why is the Solar Wind Supersonic? (Velli)

S18-04- Downstream structure and evolution of a simulated CME-driven sheath in the lower solar corona (Liu)

S18-05- Shock Formation Observed by STEREO (Russel)

S18-06- The Theory of Shock Formation in the Corona (Lee)

S18-07- White Light CME Shocks: A Case Study from STEREO/SECCHI (Ontiveros)

S18-08- MHD Simulations of the Structure, Evolution and Appearance of CME-driven Shocks (Manchester)

S18-09- Understanding the Evolution and Nature of Shocks in the Lower Corona (Opher)

S18-10- Study of a simulation in lower corona: CME propagation and Shock Evolution (Das)

O1- Other

- O1-01-** 3D Reconstructions of the Inner Heliosphere (Bisi)
- O1-02-** What Interplanetary Conditions Produce Quasi-Perpendicular Shocks? (Richardson)
- O1-03-** Space Weather Support to NASA Operations (Turner)
- O1-04-** A New Technique for Finding Electric Fields from Sequences of Vector Magnetograms (Fisher)
- O1-05-** The Solar Wind as a Magnetic Reconnection Laboratory (Gosling)
- O1-06-** Multi-Point Energetic Particle Observations of CIRs in the Present Solar Minimum (Leske)
- O1-07-** Driven Waves as a Diagnostic Tool for Alfvén Waves in the Solar Corona (Kaghashvili)
- O1-08-** Spatially dependent heating and ionization in an ICME observed by both ACE and Ulysses (Lepri)
- O1-09-** High-speed flows and magnetic properties of plasma loops (Stenson)
- O1-10-** GOES-12 SXI Pointing Refinement and Light Leak Correction (Pettigrew)
- O1-11-** The Effect of Mixed Polarities on Coronal Hole Evolution (Lionello)
- O1-12-** Calculating the 3D Velocity of CMEs Using STEREO Beacon Data (de Koning)
- O1-13-** Properties of the Fast and Slow Solar Wind and ICMEs Measured by Ulysses: Three polar orbits of observations (Ebert)
- O1-14-** Using V1, V2, and STEREO Observations to Advance Heliospheric ENA Models (Prested)
- O1-15-** The Solar Wind Speed in the Inner Heliosphere (McGregor)
- O1-16-** Turbulent 3D Reconnection (Lazarian)
- O1-17-** Magnetic Structure of Corotating Interaction Regions at 1 AU (Broiles)
- O1-18-** Helioseismic clues to the prediction, emergence, and consequences of large active regions (Hill)