

Note: All presentations are linked as **pdf** files.

Monday, September 24, 2018

[Opening words - Bojan Vršnak](#)

WG reports - M. Temmer / J. Zhang

[J. Zhang: Global Evolution of CMEs from the Sun to the Earth \(Plenary talk\)](#)

[J. Zhang: Working Group 1 \(Data\) - Progress Report](#)

[B. Vršnak: Working Group 2 \(Theory\) - Progress Report](#)

[D. Odstrčil: Working Group 3 \(Simulation\) - Progress Report](#)

[D. Webb: Working Group 4 \(Campaign events\) - Progress report](#)

[S. Patsourakos: Working Group 5 \(Bs Challenge\) - Progresses Report](#)

[O. Malandraki: Working Group 6 \(Solar Energetic Particles\) - Progress Report](#)

[M. Temmer: Working Group 7 \(MiniMax24\) - Progress Report](#)

Data & Observation related to solar-terrestrial phenomena (WG1 (data), WG5 (Bs challenge) and related abstracts from the General session on Sun & Heliosphere) - J. Zhang / A. Veronig

[L. Green: Observations of magnetic flux ropes in the solar atmosphere: what next? \(Invited\)](#)

[N. Srivastava: Evolution of coronal cavities leading to CMEs](#)

[R. Liu: Identifying the source complexity of a complex ejecta](#)

[A. Veronig: Which factors of an active region determine whether a strong flare will be CME-associated or not?](#)

[T. Mrozek: The catalogue of solar failed eruptions](#)

[T. Kaltman: Features of spectral-polarization dynamics of flare active regions by microwave observations](#)

[D. Sokoloff: Can superflares occur on the Sun? A view from dynamo theory](#)

Tuesday, September 25, 2018

Data & Observation related to solar-terrestrial phenomena (WG1 (data), WG5 (Bs challenge) and related abstracts from the General session on Sun & Heliosphere) - S. Patsourakos / J. Zhang

[C. Kay: The Effects of Uncertainty on Deflection, Rotation and Bs predictions \(Invited\)](#)

[K. Dissauer: What can we learn from coronal dimmings about the early evolution of Earth-directed CMEs?](#)

[A. Ruzmaikin: Clustering of Coronal Mass Ejections](#)

[T. Nieves-Chinchilla: Unraveling the internal magnetic configuration of the ICMEs \(Invited\)](#)

[S. Benella: On the role of the topology of magnetic clouds on galactic cosmic-ray Forbush decreases at energies above 70 MeV](#)

[A. Melkumyan: Statistical analysis of Forbush decreases observed during past five solar cycles and associated to coronal mass ejections or coronal holes](#)

[S. Hofmeister: The dependence of high-speed stream peak velocities and of the Kp index on](#)

[the positions of their source coronal holes on the Sun](#)

[P. Hess: Preparing for the Future of Heliospheric Observations \(Invited\)](#)

[M. Dosa: Long-term periodicities in the heliospheric magnetic flux density and the effects on planetary space weather](#)

[Y. Yan: Solar Radio Imaging-Spectroscopy and Heliospheric Imager](#)

Simulations and theoretical aspects of solar-terrestrial phenomena (WG2 (theory), WG3 (simulation) and related abstracts from the General session on Sun & Heliosphere) - F. Shen

[C. Shen: Interaction between multiple CMEs and its impact on space weather \(Invited\)](#)

[J. Čalogović: DBEM web application for heliospheric propagation of CMEs](#)

[M. Dumbović: Forbush decrease model for expanding CMEs \(ForbMod\)](#)

Wednesday, September 26, 2018

Simulations and theoretical aspects of solar-terrestrial phenomena (WG2 (theory), WG3 (simulation) and related abstracts from the General session on Sun & Heliosphere) - B. Vršnak / D. Odstrcil

[D. Odstrcil: Near Real-Time Simulation of Heliospheric Space Weather \(Invited\)](#)

[F. Shen: Three-dimensional MHD simulation of solar wind using a new boundary treatment: Comparison with in-situ data at Earth](#)

[I. Myshyakov: Influence of the Magnetic Decay Index Spatial Distribution on the Kinematics of the Solar Eruptive Prominence](#)

[I. Piantchitsch: Simulation of fast-mode MHD waves interacting with low density regions such as coronal holes](#)

[A. Afanasev: Numerical simulations of coronal loop kink oscillations excited by different driver frequencies](#)

Parker Solar Probe and Solar Orbiter - M. Temmer

[R. Pinto: Modeling and data analysis tools to support science at the Parker Solar Probe and Solar Orbiter era \(including the hands-on-session\) \(Invited\)](#)

[E. Dickson: STIX Software Development at Graz](#)

[B. Heber: GEANT4 simulation of the Helios E6 - Proton contamination of relativistic electron measurements](#)

Thursday, September 27, 2018

Solar energetic particles (WG6 (SEPs) and related abstracts from the General session on Sun & Heliosphere) - O. Malandraki

[C. Cohen: Solar Energetic Particles: Origin, Acceleration, and Transport \(Invited\)](#)

[M. Riazantseva: The features of plasma turbulence associated with solar transients](#)

[V. Zharkova: Acceleration of particles in 3D magnetic islands with low plasma density and their diagnostics in the heliosphere](#)

[J. Guo: Challenges of Space Weather and space radiation predictions for human explorations](#)

[to Mars](#)

Event studies using solar-terrestrial data & modeling (WG4 (campaign events) and related abstracts from the General session on Sun & Heliosphere) - D. Webb / N. Srivastava

[M. Jin: Sun-to-Earth Modeling of Coronal Mass Ejections with a Global MHD Model: Facilitating Physical Understanding and Space Weather Forecasting \(Invited\)](#)

[J. I. Campos Rozo: Solar photospheric plasma and magnetic field dynamics: modelling of the temporal evolution of flow motions](#)

[I. Dammasch: Multi-instrument observations of an X9.3 flare](#)

[S. Heinemann: Coronal Hole and Active Region Interaction observed through a CME-HSS Interaction](#)

[C. Scolini: Observation-based Sun-to-Earth simulations of geo-effective Coronal Mass Ejections with EUHFORIA \(Invited\)](#)

[T. Tsvetkov: Dynamic properties of prominence eruptions observed by AIA and LASCO](#)

[T. Podladchikova: CME acceleration and EUV wave kinematics for September 10th 2017 event](#)

[J. Seibezer: Evolution of plasma parameters during the early acceleration phase of the June 13 2010 CME event](#)

Friday, September 28, 2018

ISEST WG reports - M. Temmer / B. Vršnak

[J. Zhang: Working Group 1 \(Data\) - Summary Report](#)

[B. Vršnak: Working Group 2 \(Theory\) - Summary Report](#)

[F. Shen: Working Group 3 \(Simulation\) - Summary Report](#)

[D. Webb: Working Group 4 \(Campaign events\) - Summary Report](#)

[S. Patsourakos: Working Group 5 \(Bs Challenge\) - Summary Report](#)

[O. Malandraki: Working Group 6 \(Solar Energetic Particles\) - Summary Report](#)

J. Zhang: Conclusion & future plans