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. Odstrcil: 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 Paticles) - 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 bymicrowave 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. Piantschitsch: 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. Seibezeder: 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 Paticles) - Summary Report
J. Zhang: Conclusion & future plans