

Monday, February 17 2025

Session: Welcome, Logistics, HQ comments, and SDO status (Ballroom)

8:30 - 9:15: W. Dean Pesnell, "SDO at Fifteen (SDO Mission Status)"

9:15 - 9:45: Stephanie Yardley, "Solar Energetic Events: Recent Results and Forecasting Challenges (Invited Review)"

9:45 - 10:00: KD Leka, "Understanding and Predicting Solar Flares in the Solar Dynamics Observatory Era: where has "Big Data" gotten us? And where do we go now?"

10:00 - 10:30 Coffee Break

Session: Energetic Outbursts: Deciphering Solar Flares, CMEs, and SEPs (Ballroom)

10:30 - 10:45: Larisza Krista, "The evolution of coronal dimmings and their relationship to CMEs"

10:45 - 11:00: Louis-Simon Guité, "Flaring together: A preferred angular separation between sympathetic solar flares"

11:00 - 11:15: Rahul Yadav, "A Statistical Analysis of Magnetic Field Changes in the Photosphere during Solar Flares Using High-cadence Vector Magnetograms and Their Association with Flare Ribbons"

11:15 - 11:30: Robert Jarolim, "Unveiling the Global Magnetic Topology with Physics-Informed Neural Networks"

11:30 - 11:45: Xudong Sun, "Remarkable Magnetic Field Evolution Preceding the May 2024 Gannon Superstorm"

11:45 - 13:00: Lunch Break

12:15 - 13:00 Lunch Presentation: Hanna Rose Shell, "Projecting the Past: Films from the Vault" (Ballroom)

13:00 - 13:30: J. Todd Hoeksema, HMI and JSOC Status (Ballroom)

Session: From Creation to Emergence: Magnetic Fields of the Sun (Ballroom)

13:30 - 14:00: Hannah Schunker, "Shifting the Paradigm of Active Region Emergence on the Sun (Invited Review)"

14:00 - 14:15: Matthias Rempel, "Sunspot simulations: Dependence of penumbra properties on numerical resolution"

14:15 - 14:30: Mei Zhang, "The role of current helicity in driving solar dynamo"

14:30 - 16:00: Posters/Break (Foyer, Executive Ballroom)

16:00 - 16:30: EVE Status, Thomas Woods (Ballroom)

Session: Impacts of Solar Variability on Earth, Other Planets, and Space Weather (Ballroom)

16:30 - 17:00: Yari Collado-Vega, "SDO: A Mission Essential for Space Weather Science and Predictions (Invited Review)"

17:00 - 17:30: Rebecca Jolitz, "On the farside of solar cycle 25: Observations of a high-speed space weather event at Mars (Metcalf Travel Award)"

18:00 - 20:00: Opening Reception

Tuesday, February 18 2025

Session: Solar Internal Dynamics and Structure (Ballroom)

8:30 - 9:00: Yuto Bekki, "Numerical modelling of solar inertial modes (Invited Review)"

9:00 - 9:30: Angel Martinez Cifuentes, "Recovering the amplitudes of solar quake waves using the showerglass effect (Metcalf Travel Award)"

9:30 - 9:45: Sarbani Basu, "An in-depth exploration of the solar tachocline"

9:45 - 10:00: Nadiia Kostogryz, "Modeling HMI helioseismic observables"

10:00 - 10:30 Coffee Break

Session: Solar Internal Dynamics and Structure (Ballroom A)

10:30 - 10:45: Damien Fournier, "Modeling the signature of acoustic oscillations in HMI observables"

10:45 - 11:00: Boyang Ding, "Characterizing Solar High-Latitude Inertial Waves Using Time-Distance Helioseismic Subsurface Flow Maps"

11:00 - 11:15: Neelanchal Joshi, "Observing solar inertial modes using local correlation tracking"

11:15 - 11:30: Zhi-Chao Liang, "Amplitude variations of the $m=1$ high-latitude inertial mode"

11:30 - 11:45: Prithwitosh Dey, "Sensitivity of solar inertial modes to rotation at high-latitudes"

Session: Energetic Outbursts: Deciphering Solar Flares, CMEs, and SEPs (Ballroom B)

10:30 - 10:45: Karin Dissauer, "Investigating the Uniqueness and Causal Relationship of Precursor Activity to Solar Energetic Events"

10:45 - 11:00: Anant Telikicherla, "Statistical Investigation of Solar Flare Onsets: Physical Properties and Short-term Flare Forecasting Potential"

11:00 - 11:15: Moritz Meyer zu Westram, "Introducing Deep Survival Analysis to Solar Flare Forecasting"

11:15 - 11:30: Nariaki Nitta, "Low Coronal Disturbances Linked to Coronal Mass Ejections"

11:45 - 13:00: Lunch Break

Session: Solar Internal Dynamics and Structure (Ballroom A)

13:00 - 13:15: Sylvain Korzennik, "A new perspective on the solar internal rotation from fitting long and very long time-series."

13:15 - 13:30: Junwei Zhao, "Anomalous Phase Shifts between GONG and SDO/HMI Dopplergrams"

13:30 - 13:45: Ruizhu Chen, "Comparing Helioseismic Measurements of Solar Meridional Circulation from SDO/HMI and GONG Observations"

13:45 - 14:00: Rudolf Komm, "Solar-Cycle Variation of Large-Scale Flows in the NSSL from SC 23 to SC 26"

14:00 - 14:15: M. Cristina Rabello Soares, "Unraveling the Dynamics of the Upper Regions of the Solar Near-Surface Shear Layer"

14:15 - 14:30: Lekshmi Biji, "Plasma Flow Dynamics of Active Regions During the May 2024 Solar Storm"

Session: Energetic Outbursts: Deciphering Solar Flares, CMEs, and SEPs (Ballroom B)

13:00 - 13:15: Tingyu Gou, "Imaging a Failed Solar Eruption During an Intense Confined Flare"

13:15 - 13:30: Ying Li, "Various Features of the X-class White-light Flares in Super Active Region NOAA 13664"

13:30 - 13:45: Amy Winebarger, "Using AIA Emission Measure Inversion Failures to Track Interesting Flare Physics"

13:45 - 14:00: Graham Barnes, "Solar Flare Ribbon Morphology from Coronal Magnetic Null Point and Separator Reconnection"

14:00 - 14:15: Markus Aschwanden, "Self-Organized Criticality Systems in the SDO Era"

14:15 - 14:30: Alexis Blaise, "Assessing the energy budget of a long-lasting active region with NLFFF extrapolations"

14:30 - 16:00: Posters/Break (Foyer, Executive Ballroom)

16:00 - 16:30: AIA Status, Meng Jin (Ballroom)

Session: Next Horizon: the Future Solar and Heliophysics Missions (Ballroom)

16:30 - 17:00: James Mason, "The Future May Be as Blindingly Bright as The Sun Itself: The Abundance of New Tools to Address SDO Science (Invited Review)"

17:00 - 17:15: Craig DeForest, "Joint science with SDO, PUNCH, and NASA's HSO"

17:15 - 17:30: Laurel Rachmeler, "NOAA's Solar Observatories"

Wednesday, February 19 2025

Session: Coronal Dynamics: Unveiling the Origins of the Solar Wind (Ballroom)

8:30 - 9:00: Samantha Wallace, "Unveiling the Origins and Formation of the Solar Wind with SDO (Invited Talk)"

9:00 - 9:15: Alphonse Sterling, "How Small-scale Jet-like Solar Events from Miniature Flux Rope Eruptions Might Produce the Solar Wind "

9:15 - 9:30: Sanjiv Tiwari, "Quantification of Bursty and Steady Heating of the 4--8 MK Coronal Plasma in a Solar Active Region using Minimum, Maximum, and Average Brightness Maps"

9:30 - 9:45: Anthony Yeates, "Quantifying eruptivity in global coronal models"

9:45 - 10:00: Amir Caspi, "Observations of the 2024 April 8 total solar eclipse with CATE 2024, SAMI on NASA's WB-57, GOES/SUVI, and SDO/AIA"

10:00 - 10:30 Coffee Break

Session: Solar Internal Dynamics and Structure (Ballroom A)

10:30 - 10:45: Regner Trampedach, "Solving the Solar Oxygen Problem with Atomic Physics? "

10:45 - 11:00: Catherine Blume, "Rossby Wave Cavities in the Solar Interior"

11:00 - 11:15: Suprabha Mukhopadhyay, "Numerical studies of solar inertial modes using Dedalus"

11:15 - 11:30: Muneeb Mushtaq, "Nonlinear saturation mechanism of high-latitude inertial modes on a differentially rotating sphere"

11:30 - 11:45: Yash Mandowara, "Atypical eigenfunction of $m=3$ Rossby wave"

Session: Coronal Dynamics: Unveiling the Origins of the Solar Wind (Ballroom B)

10:30 - 10:45: Richard Morton, "Estimating the Poynting flux of Alfvénic waves in polar coronal holes across Solar Cycle 24"

10:45 - 11:00: Leon Ofman, "Modeling the Excitation, Propagation and Dissipation of MHD Waves in Coronal Magnetic Structures Motivated by SDO/AIA Observations"

11:00 - 11:15: Tong Shi, "AWSOM MHD Simulation of a Solar Active Region: Realistic Spectral Synthesis, and Statistical Analysis of Alfvén Wave Dissipation and Reflection, Scaling Laws, and Energy Budget on Coronal Loops"

11:15 - 11:30: Yang Liu, "Synoptic Maps of Solar Magnetic Field and Open Magnetic Flux"

11:45 - 13:00: Lunch Break

Session: Solar Internal Dynamics and Structure (Ballroom A)

13:00 - 13:15: Björn Müller, "Measuring the solar differential rotation with iterative helioseismic holography"

13:15 - 13:30: Dan Yang, "Direct tests of SDO/HMI far-side helioseismology using SO/PHI magnetograms"

13:30 - 13:45: Raphael Attie, "A New Perspective on Solar Convection: The Ball-tracked Carousel of Polar Faculae"

13:45 - 14:00: Allan Sacha Brun, "On the Solar Convective Conundrum: a path theory to study global solar convection"

14:00 - 14:15: Loren Matilsky, "Understanding the solar tachocline in terms of the dynamo's magnetic field penetrating deep into the radiative interior"

14:15 - 14:30: Brandon Lazard, "Investigating the Role of Radially Varying Diffusivities in Stellar Convection Modeling"

Session: Coronal Dynamics: Unveiling the Origins of the Solar Wind (Ballroom B)

13:00 - 13:15: Vishal Upendran, "Deciphering solar wind source regions using interpretable deep learning"

13:15 - 13:30: Steven Cranmer, "Testing Theories of Coronal Heating: A New Generation of 4D Forward Models Compared with SDO and Hinode/XRT Data"

13:30 - 13:45: Chris "Gilly" Gilbert, "Effective Off-Limb Data Visualization: A Review of Common Techniques"

13:45 - 14:00: Caroline Evans, "Quantifying how surface complexity influences properties of the solar corona and solar wind"

14:00 - 14:15: Ian Hewins, "Coronal Holes of Solar Cycle 24 in McIntosh style synoptic maps"

14:15 - 14:30: Wei Liu, "Coronal Cooling and Condensation near Magnetic Null Points: Feeding the Return Flow of the Chromosphere-Corona Mass Cycle"

14:30 - 16:00: Posters/Break (Foyer, Executive Ballroom)

Session: Potpourri (Ballroom)

16:00 - 16:15: Daniele Calchetti, "Comparison of the photospheric line-of-sight velocity measured by SO/PHI-HRT and SDO/HMI"

16:15 - 16:30: Oana Vesa, "The Propagation of Atmospheric Gravity Waves in the Magnetized Lower Solar Atmosphere"

16:30 - 16:45: Janis Kjell Witmer, "A Machine Learning Approach to Investigate the Evolution of Sunspots"

16:45 - 17:00: Stephan G. Heinemann, "Utilizing far-side active regions detected by helioseismology as input to magnetograms for 360° synchronic solar wind forecasting."

17:00 - 17:15: Robert Steenburgh, "A Practitioners Perspective on SDO"

17:15 - 17:30: Aisling O'Hare, "Quasi-Periodic Pulsations in TEC Measurements Synchronised with Solar Flare EUV Emission"

19:30 - 21:30: Meeting Banquet (Ballroom)

Thursday, February 20 2025

Session: Stellar insights from the SDO Observations (Ballroom)

8:30 - 9:00: Shin Toriumi, "SDO's Contributions to the Study of Solar-stellar Connections (Invited Talk)"

9:00 - 9:15: Cole Tamburri, "The Relationships among Solar Flare Impulsiveness, Energy Release, and Ribbon Development"

9:15 - 9:30: Samarth Ganesh Kashyap, "Inferring stellar butterfly diagram using the autocorrelation of acoustic oscillations"

9:30 - 9:45: Kosuke Namekata, "Scaling Relations for Sun-as-a-Star XUV Spectra and Magnetic Flux: Predicting Radiative Environments of Exoplanets around Young, Active Sun-like Stars"

9:45 - 10:00: Yuta Notsu, "High-time resolution observations of optical / near-ultraviolet / X-ray emission from two recent M-dwarf multi-wavelength observation campaigns"

10:00 - 10:30 Coffee Break

Session: From Creation to Emergence: Magnetic Fields of the Sun (Ballroom A)

10:30 - 10:45: Robert Cameron, "SDO constraints on the Babcock-Leighton dynamo processes"

10:45 - 11:00: Mausumi Dikpati, "SDO/HMI Magnetogram Analysis to Derive Active Regions' Global and Local Dynamics Before, During and After Big Solar Storms"

11:00 - 11:15: Jiayi Liu, "Towards a Robust Estimate of the Solar Photospheric Poynting Flux and Helicity Flux"

11:15 - 11:30: Aparna V., "Magnetic Helicity Signs in Filaments and Sigmoids and Active-Region Flaring Propensity"

11:30 - 11:45: Alina Donea, "Acoustic ringing around an unbreakable sunspot rushing on the solar surface"

Session: Next Horizon: the Future Solar and Heliophysics Missions (Ballroom B)

10:30 - 10:45: David Fouhey, "SuperSynthIA: Magnetograms from HMI, Hinode, and Machine Learning"

10:45 - 11:00: Harry Greatorex, "Instrumental Discrepancies in Lyman-alpha Observations of Solar Flares"

11:00 - 11:15: Stefan Hofmeister, "Revised Point-Spread Functions for SDO/AIA"

11:15 - 11:30: Dan Seaton, "The Origins and Impacts of Scattered Light in EUV Images"

11:30 - 11:45: Ritesh Patel, "Characterizing Emission in the Middle Corona with AIA During an EVE Cruciform Maneuver"

11:45 - 13:00: Lunch Break

Session: From Creation to Emergence: Magnetic Fields of the Sun (Ballroom A)

13:00 - 13:15: Asha Lakshmi KIZHAKKEKUNNATHARA VENU, "Onset of Joy's Law as a Function of Latitude"

13:15 - 13:30: Hanna Strecker, "Magnetic flux evolution of active regions over more than one solar rotation"

13:30 - 13:45: Bibhuti Kumar Jha, "Advancing the capability of Advective Flux Transport (AFT) Model by incorporating HMI Far-Side Active Regions"

13:45 - 14:00: Kinga Albert, "Using SDO/HMI and SO/PHI data to study facular contrast from two vantage points"

14:00 - 14:15: Lisa Upton, "The Open-source Flux Transport Model: Opening the Door to Surface Flux Transport Modeling"

14:15 - 14:30: Chia-Hsien Lin, "A magnetic pressure difference rule on moving bipolar pores"

Session: Next Horizon: the Future Solar and Heliophysics Missions (Ballroom B)

13:00 - 13:15: Amir Caspi, "The CubeSat Imaging X-ray Solar Spectrometer (CubIXSS): a new 16U mission to understand heating of coronal plasma in solar flares and active regions"

13:15 - 13:30: Kathy Reeves, "Beyond AIA: The EUV CME and Coronal Connectivity Observatory (ECCCO)"

13:30 - 13:45: Bennet Schwab, "New Secondary Science Instrument on Rocket EVE"

13:45 - 14:00: Adam Finley, "Near-continuous monitoring of active region nests using the current fleet of heliospheric observers"

14:00 - 14:15: Marie Dominique, "The SOSPI Radiometer, onboard the future Solar C mission from JAXA"

14:15 - 14:30: Matthew West, "Next-Generation Solar Observations: Advancing Space Weather Research from the Solar Surface through the Middle Corona"

14:30 - 16:00: Posters/Break (Foyer, Executive Ballroom)

Session: From Creation to Emergence: Magnetic Fields of the Sun (Ballroom)

16:00 - 16:30: Jonas Sinjan, "The active region magnetic field at different vantage points: an analysis with SO/PHI-HRT and SDO/HMI (Metcalf Travel Award)"

16:30 - 16:45: Jonathan Noelke, "Magnetic Structure of Coronal Dark Halos"

16:45 - 17:00: Isabella Kraus, "Coronal Bright Points statistics from SDO images and preparation for 3D MHD model to be compared with Hinode-EIS data"

17:00 - 17:15: Close of Meeting Comments (Ballroom)

18:00 - 19:30: Social Gathering (tentative)

Friday, February 21 2025

Mini-Workshops (all day)