This list of sessions is semi-final, but there still may be some changes. Please see also the list of Mini-Workshops and Technical Meetings . Poster size is not to exceed 46 inches wide and 48 inches high.

Complete Workshop Schedule (PDF) Abstract Book (PDF)

Title: ***LWS Missions Update***
Chair: Dean Pesnell (NASA GSFC)
Description: This session will include status updates on SDO instruments, LWS missions, and SDO-related projects.
Invited Speakers: Holly Gilbert, Lika Guhathakurta, Andrew Jones, Phil Scherrer, Karel Schrijver

Title: ***Irradiance on Many Scales***
Chair: Marie Dominique (SIDC/ROB)
Description: Solar irradiance varies over timescales ranging from minutes to centuries. At their own levels those variations impact the Earth atmosphere though heating, excitation and ionization processes. At longer term, they might play a role in the evolution of Earth climate. The understanding on how the various timescales and spectral ranges affect the Earth and its direct environment is far from being complete. Progresses imply accurate long- and short-term, often multi-instrumental, total and spectrally resolved solar irradiance measurements. This session will review the state-of-the-art knowledge of solar irradiance variability and its consequences, and will illustrate the benefits of SDO in this context.
Invited Speakers: Peter Bochsler, Matthieu Kretzschmar, Judith Lean, Jan Sojka

Title: ***Geospace Response***
Chair: Rachel Hock (USAF/AFRL) and David Sibeck (NASA GSFC)
Description: This session brings SDO "closer to Earth," by tracking the propagation of solar wind features from the Sun to the Earth and determining the response of the Earth's magnetosphere. The launch of the Living With a Star's Van Allen Probes mission provides an opportunity to revolutionize our understanding of the most significant response, namely geomagnetic storms.
Invited Speakers: Louis Lanzerotti, Leila Mays

Title: ***Dynamics of the Solar Interior***
Chair: Matthias Rempel (HAO/UCAR)
Description: This session will focus on dynamical processes in the solar interior including (but not restricted to):
- convection
- large scale flows (differential rotation, meridional flow)
- solar dynamo
- origin of buoyant magnetic structures

We will contrast recent results from theory and modeling with helioseismic constraints.
Invited Speakers: Shravan Hanasoge, Nick Featherstone

Title: ***Asteroseismology/Helioseismology Connection***
Chair: Aaron Birch (MPI)
Description: Asteroseismology is a rapidly evolving field that allows us to place the Sun in the context of other stars. This session will focus on new results from asteroseismology that help us understand the possible past and future states of the Sun. In addition, this session will highlight connections between asteroseismology, helioseismology, and stellar modeling.
Invited Speakers: Saskia Hekker

Title: ***The Evolution of Solar Cycle 24***
Chair: Jesper Schou (Stanford) and Dean Pesnell (NASA GSFC)
Description: This session will focus on studies of the solar cycle from the interior to the heliosphere, the variation of phenomena with solar cycle, and key topics in cycle evolution such as solar hemispheric asymmetry.
Invited Speakers: David Hathaway, Matthias Rempel

Title: ***From Emergence to Eruption***
Chair: Mark Cheung (LMSAL), Aaron Birch (MPI), Matthias Rempel (HAO/UCAR)
Description: To understand the root cause(s) of solar eruptive phenemona such as flares and coronal mass ejections, it is crucial to track the evolutionary behavior of their source regions and triggers. In particular, one must
- quantify how free magnetic energy is injected from the solar interior into the atmosphere,
- characterize magnetic configurations that are amenable to energy storage, and
- identify the triggers that instigate the abrupt release of energy in the form of eruptions.

Presentations in this session will showcase how the high cadence, resolution and duty cycle of SDO's science instruments combined with theory/modeling efforts are enabling progress toward these goals.
Invited Speakers: Doug Braun, Juan Martinez-Sykora, Slava Titov, Brian Welsch

Title: ***Coronal Heating***
Chair: Bill Abbett (Berkeley SSL)
Description: This session will review recent studies of the physics of energy transport and dissipation in the solar atmosphere. We will focus on how current and future observations can be best used in conjunction with the latest theoretical and numerical models to better understand the physical processes responsible for heating the solar corona and energizing the solar wind.
Invited Speakers: Steve Cranmer, Jim Klimchuck

Title: ***Cross-scale Coupling***
Chair: Pascal Démoulin (Observatoire de Paris)
Description: Many solar phenomena, like coronal heating and CMEs are multiscales. The aim of this session is to analyze, as best as possible, the coupling of scales in different phenomena. A few examples are the following ones. Coronal heating could occur due to injection of energy on large scales with a cascade of energy to the small and dissipative scales. At the reverse, the inverse cascade magnetic helicity to large scales could be at the origin of CMEs. Another example is the emergence of a small flux tube triggering an eruption which can itself trigger another eruption. What does SDO bring to the understanding of these coupling of scales?
Invited Speakers: Haisheng Ji, Alan Title

Title: ***Coronal Seismology, Waves and Flows***
Chair: Barbara Thompson (NASA GSFC)
Description: SDO's resolution, combined with the global coverage from the STEREO mission, are enabling unprecedented studies of wave phenomena and their connection to fundamental solar processes. This session will focus on the study of flows and wave phenomena, and their use as diagnostic tools for studying the underlying physics of coronal heating and structure, and illuminating the nature of solar structure, solar wind, flares and CMEs.
Invited Speakers: Wei Liu, Leon Ofman