

2016 Space Weather Workshop Agenda

Omni Interlocken Hotel

Monday, April 25

- 9:00 - 12:00** **Update on the Implementation of the National Space Weather Action Plan (Fir Boardroom)**
1:00 - 5:00 **Economic and Operational Impacts (Pine Boardroom)**
1:00 - 5:00 **Working Meeting on the Harmonization of Solar Energetic Particle (SEP) Data Calibrations (Interlocken AB)**
3:00 - 5:00 **Ionospheric Scales Discussion Group (Spruce Boardroom)**

5:00 - 7:00 **Welcome Networking Session (Lobby Court)**

Tuesday, April 26

- 8:30** **Conference Welcome**
Brent Gordon, NOAA/SWPC
- 8:35** **State of the Space Weather Prediction Center**
Thomas Berger, NOAA/SWPC
- 8:45** **What Happened to Those Sunspots and What Can We Expect?**
Doug Biesecker, NOAA/SWPC
- 9:05** **Space Weather Activity – A Year in Review**
Robert Rutledge, NOAA/SWPC
- 9:25 - 9:40** **Break**
- 9:40 - 11:00** **White House Space Weather Activities**
Chair: William Murtagh, OSTP (Office of Science and Technology Policy)
- 9:40** **Update on the National Space Weather Strategy and Action Plan**
Tamara Dickinson, OSTP
- 10:00** **Air Force One and Other Elements of the White House Military Office**
Tom Geyer, WHMO
- 10:20** **Update on the U.S. Government Satellite Space Weather Data Public Release**
Matthew Heavner, OSTP
- 10:40** **Live! From the White House Situation Room**
Jason Novick, The White House
- 11:00 - 12:00** **DSCOVER**
Chair: Alysha Reinard, NOAA/SWPC
- 11:00** **NOAA Goes to L1 with DSCOVER**
Doug Biesecker, NOAA/SWPC
- 11:20** **DSCOVER Magnetometer Observations**
Adam Szabo, NASA/GSFC

- 11:40 DSCOVr Faraday Cup Solar Wind Observations**
Justin Kasper, University of Michigan
- 12:00 - 2:30 Lunch and 12:30 SWPC Tour**
- 1:00 - 2:30 Poster Session: Solar and Heliosphere Applications and Research**
- 2:30 - 3:00 Afternoon Keynote: The Role of Academia in the Nation's Space Weather Program**
Dan Baker, LASP (Laboratory of Atmospheric and Space Physics)
- 3:00 - 5:00 Space and Ground Based Observations / Advances**
Chair: Rodney Viereck, NOAA/SWPC
- 3:00 Neutron Monitors – Perhaps the Original Space Weather Instrument**
Jim Ryan, University of New Hampshire
- 3:20 GOES-VW Free-Flyer Concept for Space Weather Instruments**
Frank Eparvier, LASP
- 3:40 QuakeFinder Induction Magnetometer Network: Hi Res Observations During Solar Storms**
Tom Bleier, QuakeFinder
- 4:00 GOES - 40 Years of Satellite Space Environmental Monitoring**
William Denig, NOAA/NCEI
- 4:20 Carrington – an Operational Mission to L5**
Mark Gibbs, UK Met Office
- 4:40 An Update on the COSMIC-2 Mission**
Lidia Cucurull, NOAA Global Systems Division (GSD)
- 5:00 End of Session**
- 5:30 - 7:30 10th Annual NOAA/ SWPC - Commercial Space Weather Interest Group (CSWIG)/American Commercial Space Weather Association (ACSWA) Summit Meeting - by invitation**

Wednesday, April 27

8:30 - 8:40 Space Weather Morning Forecast Brief
Dave Marshall, NOAA/SWPC Space Weather Forecasting Office

**8:40 - 10:10 Commercial Space Weather Interest Group (CSWIG)/
American Commercial Space Weather Association (ACSWA)
Roundtable Session: “Growing the Space Weather Enterprise”**

Keynote Speaker:

Admiral Thad Allen, U.S. Coast Guard (ret); and Executive Vice President, Booz Allen Hamilton.

“The Benefits of Collaboration Between Commercial Industry and the Government in Confronting the Complexities of Co-producing Successful Outcomes in Achieving National Goals Associated with the Preparation and Mitigation of Natural and Human-made Disasters.”

Featured Speaker:

Dr. Conrad C. Lautenbacher, Jr., Chief Executive Officer, GeoOptics, Inc.; and Member, ACSWA Executive Committee.

"Growing the Space Weather Enterprise: Progress in Partnership.”

Dr. Geoff Crowley, Chief Executive Officer, ASTRA LLC; and Member, ACSWA Executive Committee.

“The Role of the Commercial Sector in the Nation’s Space Weather Program.”

Panel: Keynote & Featured Speakers
Q & A

Moderator and Organizer:

Dr. Devrie S. Intriligator, Director, Space Plasma Laboratory, Carmel Research Center, Inc.; and Member, ACSWA Executive Committee.

10:10 - 10:30 Break

10:30 - 12:00 Panel: Agency Activities
Chair: Thomas Berger, NOAA/SWPC

10:30 NASA Heliophysics Division - The Science of Space Weather
Steven Clarke, NASA/Heliophysics

10:45 Space Weather Research at the National Science Foundation
Therese Moretto Jorgensen, NSF

11:00 Department of Defense Space Weather
Lt Col Mark Allen, AFW (Air Force Weather Agency)

11:15 National Weather Service
Bill Lapenta, NOAA/NWS

11:30 NESDIS

Karen St. Germain, NOAA/NESDIS

- 11:45 The USGS Geomagnetism Program**
Jill McCarthy, USGS
- 12:00 - 12:10 Benchmarking Progress in Space Weather: Reprise of the 2001 AGU Monograph on Space Weather - Space Weather Journal Special Collection Announcement**
Delores Knipp, Space Weather Journal
- 12:10 - 1:30 Lunch**
- 1:30 - 3:10 Space Weather Impacts: Electric Power Grid**
Chair: Bill Murtagh, OSTP
- 1:30 An Ensemble Approach to Communicating Extreme Space Weather Event Probability**
Seth Jonas, STPI (Science and Technology Policy Institute)
- 1:50 Adventures in Geoelectric Field Calculations and Validation**
Chris Balch, NOAA/SWPC
- 2:10 Space Weather Power System Impacts and PJM Response**
Frank Koza, PJM (Pennsylvania-New Jersey-Maryland Interconnection)
- 2:30 GIC modeling: From the Solar Wind to Power System Impacts**
Jennifer Gannon, Computational Physics, Inc.
- 2:50 Create a 21st Century US Electricity System**
Sandy MacDonald, Spire
- 3:10 - 5:00 Poster Session - General Space Weather Services & Magnetosphere Applications and Research (2 Groupings)**
- 5:00 End of Session**
- 6:00 - 9:00 Banquet Dinner at Omni Interlocken Ballroom**

Special Guest Speaker:

Dr. Tony Phillips, Spaceweather.com

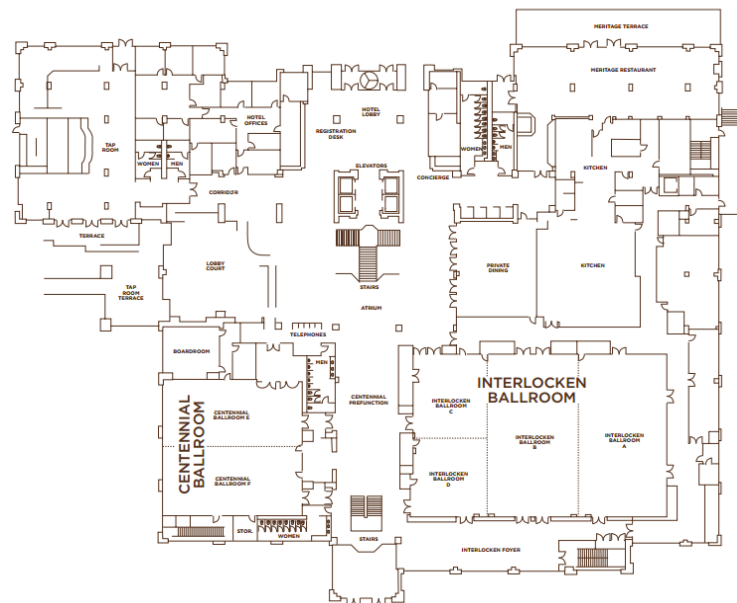
“Mutant Fungi in the Stratosphere and other Space Weather Surprises”

Thursday, April 28

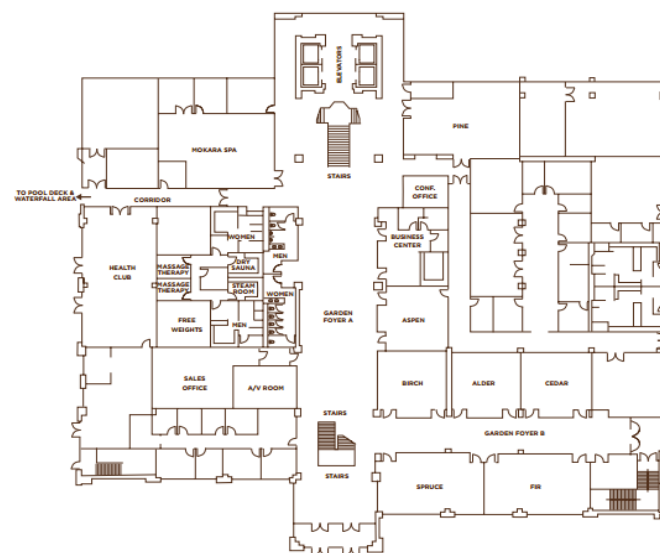
- 8:30 - 8:40 Space Weather Morning Forecast Brief**
Shawn Dahl, NOAA/SWPC Space Weather Forecasting Office
- 8:40 - 10:00 Space Weather and the Arctic: Challenges and Opportunities in the New Frontier**
Chair: Rodney Viereck, NOAA/SWPC
- 8:40 Ionospheric Mapping Using a Ground-Based GPS Receiver Network in Alaska**
Geoff Crowley, ASTRA (Atmospheric and Space Technology Research Associates)
- 9:00 Space Weather Impacts in Alaska**
Carven Scott, NOAA/NWS
- 9:20 Space Weather Effects with the Flip of a Switch**
Robert McCoy, University of Fairbanks
- 9:40 The Arctic: NORAD and USNORTHCOM Perspective**
Lt Col Jason Julian / Charlotte Browning, USNORTHCOM
- 10:00 - 10:20 Break**
- 10:20 - 12:00 Improving SWx Forecasting I: Modeling and Data Assimilation**
Chair: Doug Biescker, NOAA/SWPC
- 10:20 Living with a Star**
Elsayed Talaat, NASA/Heliophysics
- 10:40 Atmosphere and Surface Impacts by Auroral Energetic Electron Precipitation (EEP)**
Ethan Peck, Columbia University
- 11:00 Space Weather Modeling Framework (SWMF) University of Michigan Perspectives**
Dan Welling, University of Michigan
- 11:20 Forecasting Solar Indices with ADAPT**
Carl Henney, AFRL (Air Force Research Laboratory)
- 11:40 Between Earth and Space: Ensemble Modeling and Data Assimilation of the Space-Atmosphere Interaction Region**
Tomoko Matsuo, NOAA/SWPC
- 12:00 - 2:30 Lunch and 12:30 SWPC Tour**
- 1:00 - 2:30 Poster Session – Ionosphere / Thermosphere Research and Applications**
- 2:30 - 3:00 Afternoon Keynote: How Space Weather got to Boulder in the Post-WWII Years**
Joe Bassi, Embry Riddle University
- 3:00 - 3:20 A Report from the Recent Workshops on Economic and Operational Impacts**
Nicola Fox, Johns Hopkins University/Applied Physics Laboratory
- 3:20 - 5:00 International Coordination of Space Weather Activities**
Chair: Terry Onsager, NOAA/SWPC

- 3:20 Project for Solar-Terrestrial Environment Prediction (PSTEP) in Japan**
Kanya Kusano, Institute for Space-Earth Environmental Research (Nagoya University)
- 3:40 ESA SSA Federated Approach for Space Weather Services**
Juha-Pekka Luntama, ESA (European Space Agency)
- 4:00 Space Weather Services in Korea**
Dong-Hun Lee, Korean Space Weather Center
- 4:20 Mexican Space Weather Service (SCIESMEX)**
Juan Americo Gonzalez Esparza, Mexican Space Weather Service
- 4:40 The Australian Bureau of Meteorology: Space Weather Services**
Phillip Maher, Bureau of Meteorology
- 5:00 End of Session**

Interlocken First Floor



Interlocken Garden Level



Friday, April 29

- 8:30 - 8:40 Space Weather Morning Forecast Brief**
Rob Steenburgh, NOAA/ SWPC Space Weather Forecasting Office
- 8:40 - 10:00 Improving SWx Forecasting II: Modeling and Data Assimilation**
Chair: Howard Singer, NOAA/SWPC
- 8:40 Community Coordinated Assessment and Rapid Implementation of Space Weather Analysis and Forecasting Capabilities**
Masha Kuznetsova, NASA/CCMC
- 9:00 An Operational Geospace Model at the National Weather Service: Latest Update**
George Millward, NOAA/SWPC
- 9:20 Overview of NASA MSFC and UAH Space Weather Modeling and Data Efforts**
Linda Neergaard Parker, Jacobs/MSFC
- 9:40 Van Allen Probes and Space Weather**
Mona Kessel, NASA HQ
- 10:00 - 10:20 Break**
- 10:20 - 12:00 Space Weather Impacts: Radiation Modeling and Observations**
Chair: Terry Onsager, NOAA/SWPC
- 10:20 45th Weather Squadron Space Weather Support to Launch**
Kathy Winters, USAF
- 10:40 Predicting Solar Energetic Particle (SEP) Events Using SEPMOD with ENLIL**
Janet Luhman, UC Berkeley
- 11:00 The Radiation Dosimetry Experiment (RaD-X) Flight Mission: Observations for Improving the Prediction of Cosmic Radiation Health Risk at Aviation Altitudes**
Christopher Mertens, NASA
- 11:20 Comparison of Cosmic Radiation Detectors in the Radiation Field at Aviation Altitudes**
Matthias Meier, DLR
- 11:40 Space Weather at Mars: Energetic Particle Measurements on the Surface of Mars with MSL RAD**
Don Hassler, SwRI (Southwest Research Institute)
- 12:00 Closing Remarks**
Thomas Berger, NOAA/SWPC
- 12:10 End of Conference**