

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 [DSCOVR](#)
Chair: Alysha Reinard, NOAA/SWPC
- 11:00 [NOAA Goes to L1 with DSCOVR](#)
Doug Biesecker, NOAA/SWPC
- 11:20 [DSCOVR 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

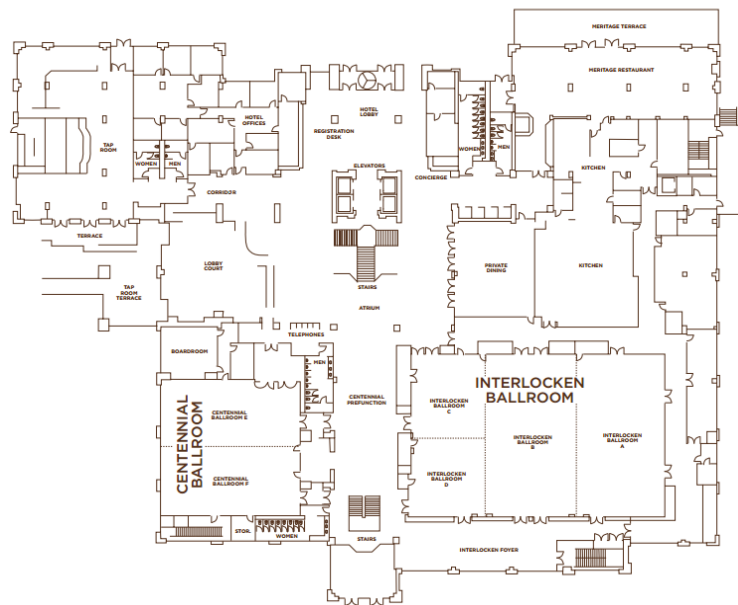
“Mutant Fungi in the Stratosphere and other Space Weather Surprises”

Thursday, April 28

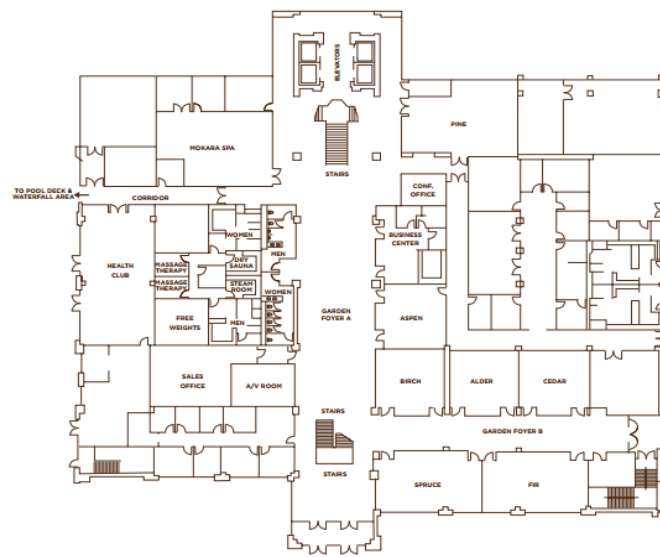
- 8:30 - 8:40** [Space Weather Morning Forecast Brief](#)
Shawn Dahl, NOAA/SWPC Space Weather Forecasting Office
- 8:40 - 10:00** **Space Weather and the Arctic: Challenges and Opportunities in the New Frontier**
Chair: Rodney Viereck, NOAA/SWPC
- 8:40** [Ionospheric Mapping Using a Ground-Based GPS 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** [Community Coordinated Assessment and Rapid Implementation of Space Weather Analysis and Forecasting Capabilities](#)
Masha Kuznetsova, NASA/CCMC
- 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** [Between Earth and Space: Ensemble Modeling and Data Assimilation of the Space-Atmosphere Interaction Region](#)
Tomoko Matsuo, NOAA/SWPC
- 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**