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Division on Engineering and Physical Sciences

Space Weather Operations and Research Infrastructure Workshop: Phase II
<https://www.nationalacademies.org/our-work/space-weather-operations-and-research-infrastructure-workshop-phase-ii>

Public Agenda –Virtual

April 11-14, 2022

ALL TIMES ARE EDT

DAY 1: Monday April 11, 2022

- 11:00 am **Keynote on Results from Phase I workshop and report**
Moderator: *Tuija Pulkkinen*, Workshop Organizing Cmtee Co-Chair

Mary Hudson, Dartmouth College
Janet Luhmann, UC Berkeley
- 11:30 am **Agency Panel: Recent updates**
Moderator: *Mary Hudson*, Committee Member

Jim Spann, NASA
Mangala Sharma, NSF
Elsayed Talaat, NOAA
- 12:15 pm **Break**
- 1:00 pm **Interagency Partnerships panel: New ways of working**
Moderator: *Tuija Pulkkinen*, Workshop Organizing Cmtee Co-Chair

Jinni Meehan, NOAA/NWS
Dan Moses, NASA/HPD
Tammy Dickinson, Science Matters, Inc.
Sage Andorka, US Space Force
- 1:45 pm **Space Weather Operations Panel**
Moderator: *Delores Knipp*, Committee Member

Mark Olson, NERC
Hazel Bain, NOAA/SWPC
Michele Cash, NOAA/SWPC
Mike Stills, Villanova University

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Scott Leonard, NOAA/OSC

2:15 pm **People perspective Panel**
Moderator: *Nicki Viall*, Committee Member

Eddie Gonzalez, NASA/GSFC
MacArthur Jones, NRL
Fran Bagenal, University of Colorado

2:45 pm **Break**

3:30 pm **Keynote Presentation: New research needs**
Moderator: *Christina Cohen*, Workshop Organizing Cmtee Co-Chair

Drew Turner, JHU/APL
Judy Karpen, NASA/GSFC
Noé Lugaz, University of New Hampshire
Katie Whitman, NASA/JSC

4:50 pm **Keynote Presentation: Prediction of ground effects**
Moderator: *Christina Cohen*, Workshop Organizing Cmtee Co-Chair

Jeff Love, USGS

5:20 pm **Adjourn Open Session**

DAY 2: Tuesday, April 12, 2022

11:00 am **Ionospheric state and irregularities panel**
Moderator: *Anthea Coster*, Committee Member

Seebany Datta-Barua, Illinois Inst. of Technology
Charles Caranno, Boston College
Jonathan Snively, Embry-Riddle Aeronautical University
Sean Bruinsma, CNES
Greg Ginot, MIT

11:40 am **Cross-scale and cross-region coupling panel**
Moderator: *Endawoke Yizengaw*, Committee Member

Josh Semeter, Boston University
Jonathan Rae, Northumbria University, Newcastle upon Tyne, England

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Astrid Maute, UCAR
Joe Huba, Syntek Technologies, Inc.
Seth Claudepierre, UCLA

12:20 pm **Break**

1:00 pm **Solar Panel**
Moderator: *Pete Riley*, Committee Member

Todd Hoeksema, Stanford University
Sarah Gibson, UCAR
Cooper Downs, Predictive Science Inc.
Craig DeForest, Southwest Research Institute
Valentin Pillet, National Solar Observatory
Phil Chamberlin, University of Colorado

1:45 pm **Solar wind Panel**
Moderator: *Nicki Viall*, Committee Member

Joe Borovsky, Space Science Institute
Vic Pizzo, NOAA/SWPC
Stuart Bale, UC Berkeley
Nick Arge, NASA/GSFC
Erika Palmerio, Predictive Science Inc.

2:30 pm **Magnetosphere Panel**
Moderator: *Terry Onsager*, Committee Member

Geoff Reeves, Los Alamos National Lab
Christine Gabrielese, UCLA
Larry Kepko, NASA/GSFC
Lauren Blum, University of Colorado
Matina Gkioulidou, JHU/APL
Vania Jordanova, Los Alamos National Lab

3:15 pm **Break**

4:00 pm **Ionosphere and thermosphere Panel**
Moderator: *Larry Paxton*, Committee Member

Naomi Maruyama, University of Colorado
Matt Zettergren, Embry-Riddle Aeronautical University
Katrina Bossert, Arizona State University

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Bill Lotko, UCAR
Larisa Goncharenko, MIT
Hanli Liu, UCAR

4:45 pm **Ground effects Panel**
Moderator: *Delores Knipp*, Committee Member

Adam Schultz, Oregon State University
Jenn Gannon, Computational Physics Inc.
Jesper Gjerloev, JHU/APL
Arnaud Chulliat, University of Colorado, NOAA/NCEI
Antti Pulkkinen, NASA/GSFC
Anna Kelbert, USGS

5:30 pm **Adjourn Open Session**

DAY 3: Wednesday, April 13, 2022

11:00 am **Data science and analytics: Keynotes**
Moderator: *Delores Knipp*, Committee Member

Ricardo Todling, NASA/GSFC
Enrico Camporeale, CU/CIRES

11:45 am **Data science and analytics: Data/model resources and curation panel**
Moderator: *Anthea Coster*, Committee Member

Carrie Black, NSF
William Schreiner, UCAR
Jack Ireland, NASA
Rob Redmon, NOAA
Masha Kuznetsova, NASA/CCMC
Alec Engell, NextGen Federal Systems

12:30 pm **Break**

1:15 pm **Data science and analytics: Data fusion and assimilation panel**
Moderator: *Charles Norton*, Committee Member

Tomoko Matsuo, University of Colorado
Alex Chartier, JHU/APL
Bernie Jackson, UCSD

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Mark Cheung, Lockheed-Martin

Eric Blasch, Air Force Office of Scientific Research

Slava Merkin, JHU/APL

2:00 pm **Data science and analytics: Machine learning and validation panel**

Moderator: *KD Leka*, Committee Member

Jacob Bortnik, UCLA

Asti Bhatt, SRI

Shasha Zou, University of Michigan

Morris Cohen, Georgia Tech

David Fouhey, University of Michigan

Hannah Marlowe, Amazon Web Services

2:45 pm **Break**

3:30 pm **New Architectures: solar and heliosphere panel**

Moderator: *Dan Baker*, Committee Member

Justin Kasper, BWX Technologies

Nicole Duncan, Ball Aerospace

Tom Berger, University of Colorado

Sue Lepri, University of Michigan

Angelos Vourlidas, JHU/APL

5:00 pm **Poster Session**

Moderator: *Ron Turner*, Committee Member

6:00 pm **Adjourn Open Session**

DAY 4: Thursday, April 14, 2022
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11:00 am **Data science and analytics: Ensemble modeling panel**

Moderator: *Mary Hudson*, Committee Member

Eric Adamson, NOAA/SWPC

Kent Tobiska, SET

Dan Welling, University of Texas Arlington

Sean Elvidge, University of Birmingham

Nick Pedatella, UCAR

Edmund Henley, UK Met Office

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11:45 am **New Architectures: Magnetosphere-ionosphere-thermosphere panel**
Moderator: *Dan Baker*, Committee Member

Phil Erickson, MIT

Brian Anderson, JHU/APL

Allison Jaynes, University of Iowa

Katelynn Greer, University of Colorado

Mike Nicolls, SpaceX

1:15 pm **Adjourn Open Session**

2:00 pm **Committee Closed Session**

TBD **Meeting Adjourns NLT 5:00 pm**