

All times are in Mountain Daylight Time (MDT) updated 6/16/2021

**Overview**

9:00-16:30	Sunday Student workshop				
	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
8:00-9:30	plenary	plenary	plenary	plenary	plenary
9:30-10:00	Break	Break	Break	Break	Break
10:00-12:00	plenary	workshops	workshops	workshops	workshops
12:00-13:00	Break	Break (Student lunch with a Scientist)	Break	Break	Break
13:00-15:00	workshops	workshops	workshops	workshops	workshops
15:00-15:30	Break	Break	Break	Break	Break
15:30-17:00	Student Panel (15:30-16:30)	poster	poster	poster	

**Detailed Agenda (SH: Science Highlight; ECSH: Early Career SC; GC: Grand Challenge)**

**Sunday 20 June 2021**

**Student workshop**

09:00-09:05	Virtual technology	
09:05-09:10	Welcome to CEDAR Student Day	Meghan LeMay, Komal Kumari
09:10-09:20	What is CEDAR?	Delores Knipp (CEDAR chair)
	<b>L1: Instrumentation and Techniques (15 min talks)</b>	
	L1.1 Incoherent Scatter Radar (ISR)	Ashton Reimer (SRI)
	L1.2 Meteor Radars	Ryan Volz (MIT)
09:20-11:12	L1.3 Lidars	Katrina Bossert (ASU)
	L1.4 Rockets	Rafael Mesquita (Clemson)
	L1.5 Optical Instruments	Asti Bhatt (SRI)
	L1.6 CubeSats	Brent Parham (MIT Lincoln Labs)
	L1.7 Global Navigation Satellite System (GNSS)	Seebany Datta-Barua (IIT)
11:12-11:30	Question & Answer	via Slido
11:30-11:40		Break
11:40-12:25	Satellites: Past, Present, Future	Katelynn Greer (LASP/CU Boulder)
12:25-13:10	Hierarchy of Atmospheric Models	Xian Lu (Clemson)
13:10-13:40		Break
13:40-13:50	Diversity, Equity and Inclusion (DEI): Call to Action	Mack Jones Jr. (NRL, DEI task Force)
		<b>L2: Back to the Basics (15 min talks)</b>
	L2.1 Ion-neutral coupling	Toshi Nishimura (BU)
	L2.2 Irregularities and Instabilities	Titus Yuan (USU)
13:50-15:26	L2.3 Joule heating	Lindsay Goodwin (NJIT)
	L2.4 Sudden Stratospheric Warming	Nick Pedatella (HAO/NCAR)
	L2.5 Acoustic Waves	Pavel Inchin (ERAU)
	L2.6 Scintillations	Sebastijan Mrak (BU)
15:26-15:40	Question & Answer	via Slido
15:40-15:50		Break
15:50-16:30	Planetary Atmospheres	Cheng Li (UM CLASP)
16:30-17:30	Wine and Whine	social event via <a href="https://wonder.me">wonder.me</a>

**Monday 6/21/2021**

**Plenary session**

8:00-8:15	Welcome	Delores Knipp (CEDAR chair)
8:15-8:35	SH 1: An important advance in understanding Instability breakdown using imagers, a lidar, modeling, and laboratory data. (A CEDAR success story)	James Hecht (Aerospace Corporation)
8:35-8:50	GC report: CONCERT	Katelynn Greer (LASP/CU Boulder)
8:50-9:10	ECSH 1: GOLD observations of the nighttime ionosphere responses to planetary wave forcing	Quan Gan (LASP/CU Boulder)
9:10-9:30	Space Weather Forecast with the Operational WAM-IPE	Tzu-Wei Fang (CIRES/SWPC)
9:30-10:00		Break
10:00-10:45	Grand Challenge tutorial: Understanding the Electromagnetic Energy Input to the Atmosphere	Alex Chartier (JHU/APL)
10:45-11:00	GC report: Multi-scale I-T System Dynamics	Aaron Ridley (University of Michigan) Toshi Nishimura (Boston University)
11:00-11:20	ECSH 2: Investigating the formation, evolution, and properties of high-latitude irregularities and their relevance in magnetosphere-ionosphere-thermosphere coupling	Lindsay Goodwin (NJIT)
11:20-11:40	Workshop Report: Strategic Vision for Incoherent Scatter Radar	Phil Erickson (MIT Haystack)
11:40-12:00	SH 2: Assimilative Mapping of Geospace Observations (AMGeO): Building Community for Collaborative CEDAR Data Science	Tomoko Matsuo (CU Boulder)
12:00-13:00		Break / Meet for lunch via <a href="https://wonder.me">wonder.me</a>
		<b>Individual Workshops</b>
13:00-15:00	<a href="#">GC-A CONCERT</a>	Katelynn Greer (LASP/CU Boulder)
13:00-15:00	<a href="#">Python for Space Science</a>	Alexa Halford (NASA)
13:00-15:00	<a href="#">Space Weather at Midlatitudes</a>	Sebastijan Mrak (Boston University)
13:00-15:00	<a href="#">Lidar Science and Engineering</a>	Jintai Li (UoA Fairbanks)
15:00-15:30		Break
15:30-16:30	<a href="#">Student office hour &amp; support</a>	via Zoom

Tuesday 6/22/2021		
<b>Plenary session</b>		
8:00-8:25	Agency update - NSF	Alan Liu (NSF-GEO)
8:25-8:40	Agency update - AFOSR	Julie Moses (AFOSR)
8:40-9:05	Agency update - NASA	Jared Leisner / TBD (NASA)
9:05-9:30	Heliophysics 2050 report	Shasha Zou (University of Michigan)
9:30-10:00	Break	
<b>Individual Workshops</b>		
10:00-12:00	<a href="#">AIM Coupling at Midlatitudes</a>	Xinzhao Chu (CU Boulder)
10:00-12:00	<a href="#">Dynamic coupling of IT during storms</a>	Wenbin Wang (HAO/NCAR)
10:00-12:00	<a href="#">Grand Challenge Initiative MLT</a>	Kolbjørn Blix (Andøya Space)
10:00-12:00	<a href="#">DASI networks</a>	Cesar Valladares (UT Dallas)
12:00-13:00	Break / Student event: Lunch with a Scientist (via Zoom)	
13:00-15:00	<a href="#">Commercial suborbital applications</a>	Todd Smith (JHU/APL)
13:00-15:00	<a href="#">Reproducibility in Geospace Science</a>	InGeO team (Asti Bhatt, Ashton Reimer, Leslie Lamarche, Todd Valentic, Pablo Reyes)
13:00-15:00	<a href="#">Decadal Survey Prep</a>	Doug Rowland (NASA)
13:00-15:00	<a href="#">GC-B CONCERT</a>	Katelynn Greer (LASP/CU Boulder)
15:00-15:30	Break	
15:30-17:00	Poster session	
Wednesday 6/23/2021		
<b>Plenary session</b>		
8:00-8:20	SH 3: Simulated Trends in Ionosphere-Thermosphere Climate Due to Predicted Main Magnetic Field Changes From 2015 to 2065	Ingrid Crossen (British Antarctic Survey)
8:20-9:05	CEDAR Prize lecture: Energy Balance and Long-Term Change in the Upper Mesosphere and Lower Thermosphere	Marty Mlynczak (NASA)
9:05-9:30	Education and diversity programs at NSF	Brandon Jones (NSF-GEO/OAD)
9:30-10:00	Break	
<b>Individual Workshops</b>		
10:00-12:00	<a href="#">Gravity waves</a>	Sharon Vadas (NWRA)
10:00-12:00	<a href="#">GC-A Multi scale IT system System Dynamics</a>	Toshi Nishimura (BU), Aaron Ridley (UoM)
10:00-12:00	<a href="#">Terrestrial Hydrogen</a>	Edwin Mierkiewicz (Embry-Riddle Aeronautical University)
10:00-12:00	<a href="#">IT storms near solar minimum</a>	Thomas Immel (UoC Berkeley)
12:00-13:00	Break / Meet for lunch via wonder.me	
13:00-15:00	<a href="#">TAD TIDs and MSTIDs</a>	Pedrina Terra dos Santos (U. Central Florida)
13:00-15:00	<a href="#">CEDAR and Climate Change</a>	Susan Nossal (UW Madison)
13:00-15:00	<a href="#">Vertical coupling</a>	Yen-Jung Wu (UoC Berkeley)
13:00-15:00	<a href="#">GC-B Multi scale IT system System Dynamics</a>	Toshi Nishimura (BU), Aaron Ridley (UoM)
15:00-15:30	Break	
15:30-17:00	Poster session	
Thursday 6/24/2021		
<b>Plenary session</b>		
8:00-9:00	CEDAR Distinguished Lecture* Modeling, Specifying and Forecasting Space Weather	Introduction by Rod Heelis (UT Dallas) Bob Schunk (Utah State)
9:00-9:10	Remembering Stan Sazykin	Bela Fejer (Utah State University)
9:10-9:30	The Flare Irradiance Spectral Model - Version 2 (FISM2), an improved model of the solar spectral irradiance at ultraviolet wavelengths	Phil Chamberlin (LASP/CU Boulder)
9:30-10:00	Break	
<b>Individual Workshops</b>		
10:00-12:00	<a href="#">AIM Coupling at High Latitudes</a>	Xinzhao Chu (CU Boulder)
10:00-12:00	<a href="#">IT asymmetries</a>	Astrid Maute (HAO/NCAR)
10:00-12:00	<a href="#">Data Science in CEDAR</a>	Ryan McGranaghan (ASTRA)
10:00-12:00	<a href="#">GC-A Poynting Flux</a>	Alex Chartier (JHU/APL)
12:00-13:00	Break / Meet for lunch via wonder.me	
13:00-15:00	<a href="#">2021 Eclipses</a>	Shunrong Zhang (MIT)
13:00-15:00	<a href="#">Equatorial space physics and space wx</a>	Dave Hysell (Cornell)
13:00-15:00	<a href="#">CEDAR DEI</a>	DEI taskforce (chairs Mack Jones, Julio Urbina)
13:00-15:00	<a href="#">Model software engineering</a>	Michael Hirsch (BU)
15:00-15:30	Break	
15:30-17:00	Poster session	
Friday 6/25/2021		
<b>Plenary session</b>		
8:00-8:20	SH 4: Whole atmosphere coupling by the quasi-6-day wave during the September 2019 Antarctic sudden stratospheric warming	Yosuke Yamazaki (GFZ Potsdam)
8:20-8:40	ECSH 3: New Findings of the response of thermospheric composition to low-moderate geomagnetic activity	Xuguang Cai (NCAR)
8:40-8:55	Poster prize announcement	Poster Committee chairs
8:55-9:15	ECSH 4: Collective Science: Magnetosphere-Ionosphere-Atmosphere Coupling and the Building of an Amateur Radio Citizen Science Community	Nathaniel Frissell (U. of Scranton)
9:15-9:30	Using HAARP to build a Subauroral Geophysical Observatory in Gakona AK	Robert McCoy (UoA Fairbanks)
9:30-10:00	Break	
<b>Individual Workshops</b>		
10:00-12:00	<a href="#">GC-B Poynting Flux</a>	Alex Chartier (JHU/APL)
10:00-12:00	<a href="#">Synergy of Models</a>	Doğacan Öztürk (UoA Fairbanks)
10:00-12:00	<a href="#">Instrumentation and Calibration</a>	Jeff Baumgardner (BU)
10:00-12:00	<a href="#">Meteoroids and Space Debris</a>	Julio Urbina (PSU)
12:00-13:00	Break / Meet for lunch via wonder.me	
13:00-15:00	<a href="#">Non storm time IT variations</a>	Yongliang Zhang (JHU/APL)
13:00-15:00	<a href="#">AMGeO</a>	Tomoko Matsuo (CU Boulder)
13:00-15:00	<a href="#">Thermospheric Dynamics Measurements</a>	Sovit Khadka (NJIT)
13:00-15:00	<a href="#">Remembering Stan Sazykin: New Results In Subauroral Science</a>	Phil Erickson (MIT)

Adjourn