

All times are in Mountain Daylight Time (MDT) updated 5/14/2021

Overview	Quick links to specific days & session				
9:00-16:30	<a href="#">Sunday Student workshop</a>				
	<a href="#">Monday</a>	<a href="#">Tuesday</a>	<a href="#">Wednesday</a>	<a href="#">Thursday</a>	<a href="#">Friday</a>
8:00-9:30	<a href="#">plenary</a>	<a href="#">plenary</a>	<a href="#">plenary</a>	<a href="#">plenary</a>	<a href="#">plenary</a>
9:30-10:00	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>
10:00-12:00	<a href="#">plenary</a>	<a href="#">workshops</a>	<a href="#">workshops</a>	<a href="#">workshops</a>	<a href="#">workshops</a>
12:00-13:00	<a href="#">Break</a>	<a href="#">Break (Student lunch with a Scientist)</a>	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>
13:00-15:00	<a href="#">workshops</a>	<a href="#">workshops</a>	<a href="#">workshops</a>	<a href="#">workshops</a>	<a href="#">workshops</a>
15:00-15:30	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>	<a href="#">Break</a>
15:30-17:00	Student Panel (time TBD)	<a href="#">poster</a>	<a href="#">poster</a>	<a href="#">poster</a>	

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

Sunday 20 June 2021	
Student workshop	
09:00-09:05	Virtual technology & ground rules
09:05-09:10	Welcome & CEDAR Student Newsletter Meghan LeMay, Komal Kumari
09:10-09:20	What is CEDAR? Delores Knipp (CEDAR chair)
<b>L1: Instrumentation and Techniques (pre-recorded 15 min talks)</b>	
09:20-11:12	L1.1 Incoherent Scatter Radar (ISR) Ashton Reimer (SRI)
	L1.2 Meteor Radars Ryan Volz (MIT)
	L1.3 Lidars Katrina Bossert (ASU)
	L1.4 Rockets Rafael Mesquita (Clemson Uni.)
	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
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 Uni.)
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 (pre-recorded 15 min talks)</b>	
13:50-15:26	L2.1 Ion-neutral coupling Toshi Nishimura (BU)
	L2.2 Irregularities and Instabilities Titus Yuan (USU)
	L2.3 Joule heating Lindsay Goodwin (NJIT)
	L2.4 Sudden Stratospheric Warming Nick Pedatella (HAO/NCAR)
	L2.5 Acoustic Waves Paul Inchin (ERAU)
	L2.6 Scintillations Sebastijan Mrak (BU)
15:26-15:40	Question & Answer
15:40-15:50	Break
15:50-16:30	Planetary Atmospheres Cheng Li (UM CLASP)
16:30-17:30	Whine with a Scientist social event via <a href="#">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)
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	
<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 event/ Panel (Student office hour support)</a>	
<b>Tuesday 6/22/2021</b>		
<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	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 / Lunch with a Scientist	
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	
<b>Wednesday 6/23/2021</b>		
<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	
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	
<b>Thursday 6/24/2021</b>		
<b>Plenary session</b>		
8:00-9:00	Modeling, Specifying and Forecasting Space Weather	Bob Schunk (Utah State)
9:00-9:20	The Flare Irradiance Spectral Model - Version 2 (FISM2), an improved model of the solar spectral irradiance at ultraviolet wavelengths	Phil Chamberlin (LASP/CU Boulder)
9:20-9:30	Memorial Stan Sazykin	TBD
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	
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	

<b>Friday 6/25/2021</b>		
<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 Frisnell (U.of Scranton)
9:15-9:30	HAARP update	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	
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="#">New Results In Subauroral Science</a>	Phil Erickson (MIT)
Adjourn		