2025 CEDAR/GEM Summer Workshop Schedule

University of New Hampshire

Student Day

8:30-9:00 **Introduction, Logistics and Community Care Discussion** (Student Reps)

9:00-9:20 **Plasma Physics** (Oshina Jagtap)

9:20-9:40 **Space Weather (**Vincent Ledvina)

9:40-10:00 Break

10:00-10:20 **CEDAR Regime 1 (MLT)** (Jackson Jandreau)

10:20-10:40 **CEDAR Regime 2 (IT)** (Brenna Royersmith)

10:40-11:00 **Mag-Iono-Therm Coupling** (Jodie McLennan)

11:00-11:20 **Coffee Break** (Meditation with Bhagyashree Wahgule)

11:20-11:40 **GEM Regime 1 (IMAG)** (Declan O'Brien)

11:40-12:00 **GEM Regime 2 (Magnetopause)** (Stephanie Colón-Rodríguez)

12:00-13:20 Lunch (Junior Ballroom B&C)

13:20-14:20 **Parallel Sessions**

(318) CEDAR: Ground Based Instruments (Asti Bhatt, Kylee Branning, Simon Shepherd) 318

(308) GEM: Modeling (Roger Varney, Jack Wang) 308

(309-310) Career: Proposal writing workshop (Jacob Bortnik, Lindsay Goodwin, and Chih-Ting Hsu) 309-310

(319-320) Skills: CEDAR/GEM databases (Katherine Cariglia, Jesper Gjerloev) 319-320

14:20-14:40 Break

14:40-15:40 **Parallel Sessions**

(318) CEDAR: Modeling (Aaron Ridley)

(308) GEM: Artificial Intelligence in Space Age (Valluri Sai Gowtam and Xiangning Chu)

(309-310) Career: Future of Space Missions (Scott Bailey + Douglas Rowland)

(319-320) Skills: Science Communication (Claire Gasque, Madeline Evans)

15:40-16:00 Break

16:00-17:00 **Parallel Sessions**

(318) CEDAR: Space-based Instruments (Colin Triplett, Joanne Wu, Jia Yue)

(308) GEM: Instruments (Sarah Vines)

(309-310) Career: How to become a PI of your own mission (Ed Thiemann, Stephen Kaeppler)

(319-320) Skills: Data visualization (Jessica Norrell, Lindsay Goodwin)

Central Time

07:00 AM - 08:00 AM

08:00 AM - 09:30 AM

09:30 AM - 10:00 AM

10:00 AM - 12:00 PM

12:00 PM - 01:30 PM Lunch Break

01:30 PM - 03:30 PM

03:30 PM - 04:00 PM

04:00 PM - 06:00 PM

06:00 PM - 08:30 PM Evening Events

Late Hours

6/22/2025 (Sun)

AB — **Student Day**

6/23/2025 (Mon)

AB — **Plenary Session**

Opening Remarks: Christine Gabrielse & Mark Conde

Welcome from AGS Director: Anne Johansen & John Hammond

Code of Conduct Review: Christine Gabrielse & Mark Conde

Student Day Overview and Introductions: Austin Smith, Erika Hathaway, Sophie Phillips, Aidan Thayer

Anti-Harassment Tutorial: Blair Schneider

Workshop Overview: Christine Gabrielse & Mark Conde

Distinguished Lecture: Phil Erickson
Decadal Survey Overview on Effective Outreach: Allison Jaynes
Public Outreach and Engagement: From Space Sounds to Penguins: Michael Hartinger
Kathryn McWilliams Memoriam: Daniel Billet

6/24/2025 (Tue)

A — **CEDAR Plenary Session**

Welcome: Hanne Mauriello, Lynn Harvey & Mark Conde
Grand Challenge report: Jens Oberheide
Grand Challenge report: Titus Yuan
New Grand Challenge Introduction: Leslie Lamarche
Early Career Science Highlight I: Komal Kumari
Science Highlight I: Bill Swartz
CEDAR Workshop in the Near Future: Lynn Harvey, Kristina Lynch, Katelyn Greer, Romina Nikoukar, Gareth Perry

B — ***GEM Plenary Session***

Welcome and Announcements: C. Gabrielse

Focus Group Tutorial: Radiation Belts as a System of Systems: Harriet George

Focus Group Tutorial: Magnetic Reconnection: The Key to Understanding Earth's Space Environment: Yi Qi

Session Announcements: Session Conveners

6/25/2025 (Wed)

AB — **Plenary Session**

Agency Talks

NSF: Shikha Raizada and Vania Jordanova

NASA: Joe Westlake

NOAA: Irfan Azeem

ONR: Bruce Fritz

AFOSR: Julie Moses

Q&A: All Agencies

6/26/2025 (Thu)

A — **CEDAR Plenary Session**

Poster Prize Announcement: Titus Yuan

CEDAR Prize Lecture: Global-scale wave impacts on the coupled ionosphere-thermosphere system from daily to sub-seasonal timescales: Jens Oberheide

Early Career Science Highlight II: Zishun Qiao

Science Highlight II: Is the lower atmosphere important for satellite drag and reentry?: Jia Yue

B — ***GEM Plenary Session***

Welcome and Announcements: Allison Jaynes

Focus Group Tutorial: Multiscale Dayside Transients and their Effect on Earth's Magnetosphere: Savvas Raptis

GEM Student-Chosen Speaker: Budget Science in an Uncertain Age: Tony Rogers

Session Announcements: Session Conveners

6/27/2025 (Fri)

AB — **Plenary Session**

Heliophysics Moving Forward

Welcome and Announcements: Christine Gabrielse & M. Conde

Decadal Survey Summary: Stephen Fuselier and Robyn Millan

Agency Response and Future Outlook: Jared Leisner

NASA LWS Program Analysis Group (LPAG) Updates and LWS Focused Science Topics (FST) Solicitation for FY26+: Shasha Zhou

Closing Remarks: Lynn Harvey, Allison Jaynes, Christine Gabrielse, Mark Conde

Coffee Break

Concurrent Sessions 1

		6/23/2025 (Mon)	6/24/2025 (Tue)	6/25/2025 (Wed)	6/26/2025 (Thu)	6/27/2025 (Fri)
AB	*Plenary Session*					
A			MESO-MPEC-CEDAR Rockets	MESO-CEDAR Ground-based strategy	MESO-MMV-SCIMM-CEDAR MAGE	MESO-KiTS-CEDAR Magnetotail
B			RBSoS-CEDAR Radiation belt	MPEC-CEDAR Whole Atmo	MPEC-CEDAR High-lat thermosphere	MPEC-CEDAR Geospace modeling
307			GIC	GIC	RX	
308			CP	RBSoS	RBSoS	CEDAR: Meteor
309-310			MDT-RX	MLGEM-CEDAR Storm Challenge	GIC - GMAG	COMP - RBSoS
318			CEDAR: Predictability	CEDAR: Decadal variations	CEDAR: Waves & circulation	CEDAR: ISR World Day
319-320			CEDAR: Hazards	CEDAR: Patch 2 (GC)	CEDAR: Equatorial capability	CEDAR: GWs 2 (GC)
305-306					*10:00 PM - 11:00 PM* ***Compassionate Leadership for Burnout***	
Junior Ballroom	*GEM - GEMEE Lunch + CEDAR mentor*		*GEM - Student Lunch + Rep Candidates Presentations*	*Agency office hours*	*CEDAR Student feedback lunch*	*Townhall: Advocacy in Funding Uncertainty*
302-303					*GEM SC meeting*	
Board 2			*CEDAR - Judge's lunch*	*CEDAR - Judge's lunch*	*CEDAR - CSSC Lunch*	

Concurrent Sessions 2

		6/23/2025 (Mon)	6/24/2025 (Tue)	6/25/2025 (Wed)	6/26/2025 (Thu)	6/27/2025 (Fri)
A		KiTS-RX-MESO-CEDAR Substorm 1	MESO-CEDAR STEVE	MESO-CEDAR Multi-scale		MPEC-MESO-CEDAR Model-Data
B		COMP-CEDAR Comparative ionosphere	MPEC-CEDAR Ionospheric currents	MPEC-CEDAR ITM		GEM-CEDAR Career dev
307		MPEC		RX		GIC
308		CP	COMP	RBSoS		CEDAR: Scintillation
309-310		MDT	RBSoS-CP	MLGEM-CEDAR Machine Learning		KiTS - COMP
318		CEDAR: SC25 Ascending	CEDAR: Trends	CEDAR: WACCM-X		CEDAR: Geocorona
319-320		CEDAR: Decadal	CEDAR: Patch (GC)	CEDAR: Equatorial		CEDAR: Weather (GC)
AB					**Community Care Plenary Session: Unraveling Burnout for Scientists**	

Coffee Break

Concurrent Sessions 3

		6/23/2025 (Mon)	6/24/2025 (Tue)	6/25/2025 (Wed)	6/26/2025 (Thu)	6/27/2025 (Fri)
A		KiTS-RX-MESO-CEDAR Substorm 2	Poster Hall	Poster Hall		MESO-CEDAR Electrodynamic coupling
B		MMV-CEDAR Snakes	**03:30 PM - 06:30 PM Poster session**	**03:30 PM - 06:30 PM Poster session**		MPEC-CEDAR Auroral science
307		MPEC			RX	
308		CP			SCIMM	
309-310		MDT			MPEC-CEDAR Conductance	
318		CEDAR: TIDs			CEDAR: Exosphere/MIT coupling	CEDAR: Neutral winds
319-320		CEDAR: GDC decadal			CEDAR: GWs (GC)	CEDAR: Weather 2 (GC)
Hilton Hotel	***06:00 - 07:30 pm Welcome Reception***					
Junior Ballroom	***GEM | CEDAR Students Dinner***			AB	***Banquet***	
Board 2	***6:30-8:00 PM CEDAR - CSSC dinner***	Board 2	***3:30-8:30 PM CEDAR - Judge's dinner***	Board 2 ***3:30-8:30 PM CEDAR - Judge's dinner***		
Principal Park			***18:40-21:00+ Excursion - Iowa Cubs baseball game***			

A	**Grand Ballroom B**	**B**	**Grand Ballroom B**	**Number**	**3rd floor Breakout Rooms**	**Junior Ballroom**	**Junior Ballroom BC**
Board 2	**Boardroom 2**	**Poster Hall**	**Grand Concourse + 312-316**				

2025 CEDAR/GEM Summer Workshop - Keys

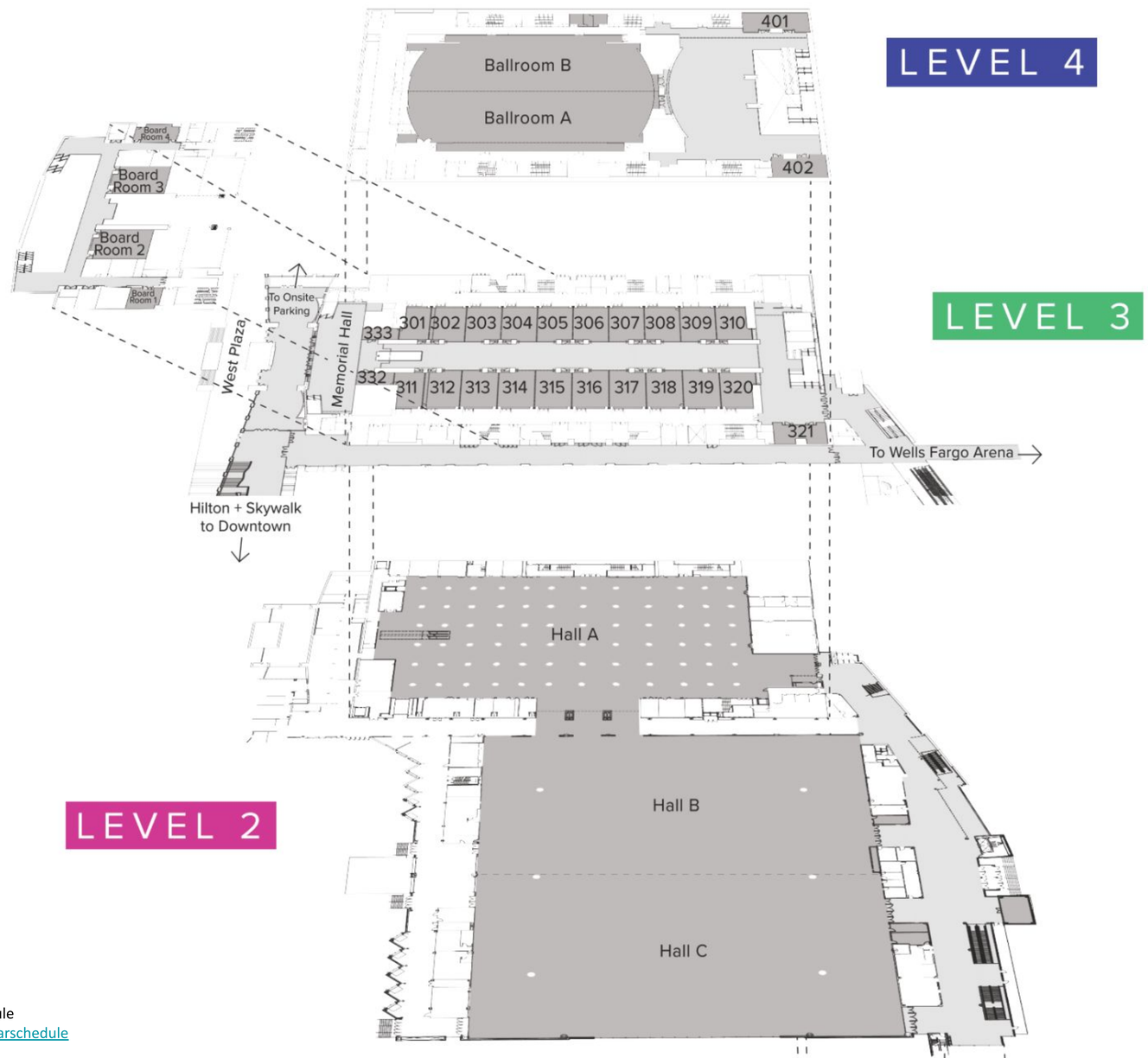
Schedule Keys	Focus Groups	FG Leaders	Research Area(s)
CP	The Impact of the Cold Plasma in Magnetospheric Physics	Gian Luca Delzanno, Natalia Buzulukosva, Barbara Giles, Roger Varney, and Joe Borovsky	IMAG
SCIMM	Self-Consistent Inner Magnetospheric Modeling	Cristian Ferradas, Chao Yue, Jacob Bortnik, and Qianli Ma	IMAG/MIC
GIC	Understanding the causes of geomagnetic disturbances in geospace for hazard analysis on geomagnetically induced currents	Xueling Shi, Dogacan Su Ozturk, Mark Engebretson, Zhonghua Xu, E. Joshua Rigler	GSM/MIC
MESO	Mesoscale drivers of the nightside transition region: ionospheric and magnetotail evaluations	Bea Gallardo-Lacourt, Gareth Perry, Emma Spanswick, Yari Collado-Vega, and Bashi Ferdousi	MPS/MIC
MPEC	Magnetospheric Sources of Particle Precipitation and Their Role on Electrodynamic Coupling of Magnetosphere-Ionosphere-Thermosphere Systems	Dogacan Su Ozturk, Dong Lin, Yiqun Yu, Katherine Garcia-Sage, Stephen Kaeppler	MIC/GSM
COMP	Comparative Planetary Magnetospheric Processes	George Clark, Wen Li, Bob Marshall, Dan Gershman, Peter Delamere, Shannon Curry	SWMI/MPS
KiTS	Kinetic Plasma Processes in the MagnetoTail during Substorm Dynamics	Harry Arnold, Jason Derr, Akhtar Ardakani, Anton Artemyev	MPS
RBSoS	Radiation Belts as a System of Systems	Harriet George, Man Hua, Adam Michael, Luisa Capannolo	IMAG
MDT	Multiscale Dayside Transients and their Effect on Earth's Magnetosphere	Savvas Raptis, Ivan Vansko, Imogen Gingell, Terry Z. Liu, Ying Zou	SWMI
RX	Magnetic Reconnection: The Key to Understanding Earth's Space Environment	Yi Qi, John Dorelli, Katherine Goodrich, Chen Shi, M. Hasan Barbhuiya, Krishna Khanal	SWMI/GSM

Schedule Keys	Resource Groups	FG Leaders	Research Area(s)
MMV	Modeling methods and validation	Mike Liemohn, Lutz Rastaetter, Alexa Halford, Josh Rigler	
MLGEM	Machine Learning based Geospace Environment Modeling	Hyunju Connor, Matthew Argall, Xiangning Chu, Banafsheh Ferdousi, Sai Gowtam Valluri	

Schedule Keys	Other Groups	FG Leaders	Research Area(s)
SBCCI	The Sam Bingham Community Cares Inititive	GEM Steering Committee	

GEM workshop home page
https://gemworkshop.org/

GEM wiki
https://tinyurl.com/gemwiki

GEM Code of Conduct
https://gemworkshop.org/code-of-conduct/

Detailed Schedule
https://tinyurl.com/cedarschedule