

**Agenda for 2008 CEDAR Workshop
16 - 21 June 2008
Zermatt Spa & Resort
Midway, Utah**

Monday, 16 June 2008

	CEDAR Student Workshop (Non-students Welcome) Theme - Space Weather Influences on the Ionosphere Matterhorn	Co-Chairs J Fentzke (U CO) and R Nikoukar (U IL) (CEDAR student reps)
08:00-09:00	Breakfast, Registration, Sign Travel Vouchers	Matterhorn Concourse
09:00-09:05	Student Welcome from NSF	R. Behnke/R. Robinson (NSF)
09:05-09:20	From a CEDAR graduate student to the CEDAR Chair	J. Thayer (CSSC Chair)
09:20-09:30	Agenda information and organizational details	J. Fentzke and R. Nikoukar (CSSC student reps)
09:30-10:30	Keynote Talk #1: Space Weather Influences on the Ionosphere	T. Bogdan (NOAA SWPC)
10:30-10:45	--- Break ---	
10:45-11:45	Student Tutorial: Magnetosphere-Ionosphere-Thermosphere Coupling Processes	J. Huba (NRL)
11:45-12:15	Space Weather: Observational evidence for coupling and feedbacks involving the ITM	J. Kozyra (U Mich)
12:15-13:45	Lunch at nearby banquet room (pay own) or on own	
12:25	Bus leaves Zermatt for south restaurants in Heber City	
13:30	Bus leaves south Heber City for Zermatt	
13:45-14:15	Brainstorming - Small Satellites	T. Moretto (NSF)
14:15-14:45	High Latitude Space Weather	A. Stromme (EISCAT Scientific Association)
14:45-15:00	--- Break ---	
15:00-15:30	Depletions, Extreme Gradients, and Structures: Space Weather in the Low- and Mid-Latitude Ionosphere	J. Makela (U IL)
15:30-16:00	Space Weather Interactive Demo	M. Kuznetsova (NASA GFSC)
16:00	Adjourn	
16:15	Bus departs Zermatt for Midway Elementary (soccer field) for CEDAR Annual Soccer Game	J. Chau, R. Nikoukar
16:00-19:00	Free time for student recreation Sand volleyball, tennis, indoor/outdoor pool, pool in the bar, frisbee	Zermatt Resort & Spa
18:15	Bus departs Midway Elementary for Zermatt	
19:30-21:00	Reception Buffet for Students and Non-Students	Matterhorn
	-or-	
19:30-21:30	CSSC Dinner Meeting	Grub Steak (Park City)

Tuesday, 17 June 2008

All sessions will be held in Matterhorn unless otherwise noted

	All posters can go up in the Bernese Center	
07:15-08:00	Breakfast in Matterhorn Concourse	
08:00-08:15	Opening Address and Chair transition	R. Behnke (NSF) J. Thayer (CSSC)
08:15-08:25	Introduction of students by Institution	R. Nikoukar (U IL)
08:25-09:10	CEDAR Prize Lecture: The coupling of the lower atmosphere to the thermosphere via gravity wave excitation, propagation and dissipation	S. Vadas (NWRA/CoRA)

09:10-09:20	Report of Student Workshop	J. Fentzke (U CO)
09:20-09:40	CAWSES-II	S. Avery (WHOI)
09:40-10:10	--- Break (Posters go up in Bernese Center) ---	
10:10-10:20	NSF Aeronomy Update	C. Fesen (NSF)
10:20-11:05	CEDAR: The Integrative Aeronomy Concept	J. Thayer (U CO)
11:05-11:25	Science Highlight #1: Coupling from the lower atmosphere to the MTI - Example studies and new opportunities	D. Fritts (CoRA/NWRA)
11:30-13:00	Lunch at nearby banquet room (pay own) or on own	
11:40	Bus leaves Zermatt for south restaurants in Heber City	
12:45	Bus leaves south Heber City for Zermatt	
13:00-15:00	<ul style="list-style-type: none"> ▪ Geospace Response to Solar Minimum Drivers I (Matterhorn) ▪ Arecibo Friends I (Grindelwald) ▪ Lower-upper Atmosphere Coupling (Interlaken) ▪ Space Science Instrumentation (Davos) ▪ Community and Data Access with the CEDAR wiki (Basel) 	<ul style="list-style-type: none"> ▪ J. Kozyra ▪ S. Gonzalez ▪ D. Fritts, M. Taylor ▪ F. Lind, J. Urbina ▪ P. West, B. Emery
15:00-16:00	--- Networking Break ---	
16:00-19:00	Poster Session #1 (MLT) and Reception (Bernese Center)	
17:45 and 19:45	Bus departs Zermatt for Park City	
20:30 and 22:00	Bus departs Park City for Zermatt	

Wednesday, 18 June 2008

All sessions will be held in Matterhorn unless otherwise noted

07:15-08:00	Breakfast in Matterhorn Concourse	
08:00-09:00	Tutorial #1: Atmospheric gravity waves: Applying classroom physics to research	H-L. Liu (NCAR)
09:00-09:10	Interim Post-Doc Report #1: Modeling and interpretation of airglow signatures for small-scale and ducted gravity waves	J. Snively (USU)
09:10-09:20	Interim Post-Doc Report #2: Imaging Studies of Ionospheric Instabilities	C. Martinis (BU)
09:20-09:30	Hiring opportunities in space weather research at AFRL / Status of the C/NOFS satellite	O. de la Beaujardiere & J. Mozer (AFRL)
09:30-09:35	Embry Riddle's new PhD in Engineering Physics	J. Olivero (ERAU)
09:35-10:00	--- Break ---	
10:00-10:20	Final Post-Doc Report #1: Modeling Studies of Optical Properties of Sprite Streamers and Their Chemical Effects on the Upper Atmosphere	N. Liu (PSU/FIT)
10:20-10:40	Final Post-Doc Report #2: Physical Interpretation of the Thermosphere-Ionosphere Response to Geomagnetic Storms	M Fedrizzi (NOAA/CIRES)
10:40-11:00	Science Highlight #2: Exploring the active role of the ITM in the Sun-Earth system: New questions and opportunities from "Integrative Aeronomy"	J Kozyra (U MI)
11:00-13:00	Discussion of "The Integrative Aeronomy Phase" (Grindelwald with lunch)	J. Thayer (U CO)
11:00-13:00	Lunch at on own, at Schneitter's (pay own), or in Grindelwald	
11:10	Bus leaves Zermatt for south and north restaurants in Heber City	
12:35	Bus leaves south and north Heber City for Zermatt	
13:00-15:00	<ul style="list-style-type: none"> ▪ Geospace Response to Solar Minimum Drivers II (Matterhorn) ▪ Ground-Space Models for Studying Atmospheric Coupling I (Grindelwald) ▪ MLT Science Involving Lidars I (Interlaken) ▪ Meteors and the Upper Atmosphere (Davos) ▪ World Day Scheduling (Basel) 	<ul style="list-style-type: none"> ▪ J. Kozyra ▪ H-L. Liu, D. Siskind, R. Schunk ▪ D. Fritts, G. Swenson, J. She, X. Chu ▪ L. Dyrud, D. Janches ▪ W. Swartz

15:00-16:00	Networking Break	
16:00-18:00	<ul style="list-style-type: none"> ▪ Arecibo Friends II (Matterhorn) ▪ Ground-Space Models for Studying Atmospheric Coupling II (Grindelwald) ▪ MLT Science Involving Lidars II (Interlaken) ▪ Fabry-Perot Analysis (Davos) ▪ Space Weather Effects and Aeronomy Studies at the Plasmaspheric Boundary Layer (Basel) 	<ul style="list-style-type: none"> ▪ S. Gonzalez ▪ H-L. Liu, D. Siskind, R. Schunk ▪ D. Fritts, G. Swenson, J. She, X. Chu ▪ J. Meriwether ▪ A. Coster, J. Ruohoniemi
18:15 and 19:45	Bus departs Zermatt for Park City	
20:30 and 22:15	Bus departs Park City for Zermatt	

Thursday, 19 June 2008

All sessions will be held in Matterhorn unless otherwise noted

07:15 and 08:30	Breakfast in Matterhorn Concourse	
07:15 and 08:30	Student Breakfast with NSF (pick up breakfast from concourse) (Monte Rosa)	
08:30-09:30	Tutorial #2: Imaging geospace: Providing critical understanding of Earth's atmosphere-ionosphere system	T. Immel (UCB)
09:30-10:05	--- Break ---	
10:05-10:15	Interim Post-Doc Report #3: Coordinated UV imaging of equatorial plasma bubbles using TIMED/GUVI and DMSP/SSUSI	J. Comberiate (JHU/APL)
10:15-10:35	RISR (Resolute ISR), A strategy for completion and first operations	J. Kelly (SRI)
10:35-10:55	Science Highlight #3: CEDAR community involvement in NASA strategic planning	A. Christensen (Aerospace)
10:55-13:00	Lunch at Schneitter's (pay own) or on own	
11:05	Bus leaves Zermatt for south and north restaurants in Heber City	
12:35	Bus leaves south and north Heber City for Zermatt	
13:00-15:00	<ul style="list-style-type: none"> ▪ Outstanding Global Issues in Ionosphere Thermosphere Research I (Matterhorn) ▪ MLT Spatial and Temporal Variabilities: TIMED and CEDAR Collaboration (Grindelwald) ▪ Research Opportunities at Millstone Hill Observatory (Interlaken) ▪ The Low-latitude Ionospheric Sensor Network (LISN) (Davos) ▪ Planning for Compact Echelle Spectrograph for Aeronomic Research (CESAR) (Basel) 	<ul style="list-style-type: none"> ▪ W. Bristow, R. Doe, J. Huba, L. Paxton, A. Ridley ▪ J-H. Yee, E. Talaat ▪ P. Erickson, F. Lind, A. Coster ▪ C. Valladares, T. Bullett, J. Chau, V. Eccles, E. Kudeki, R. Woodman ▪ T. Slanger, E. Kendall
13:15	Leave Zermatt for Heber Valley Railroad. Tour is 2-5 pm.	
17:15	Leave Heber City Railroad for Zermatt	
15:00-16:00	--- Networking Break ---	
16:00-19:00	Poster Session #2 (non-MLT) and Reception (Bernese Center)	
17:45 and 19:45	Bus departs Zermatt for Park City	
20:30-22:00	Student-sponsored Salsa Party (all invited) (Bernese Center)	
20:30 and 22:00	Bus departs Park City for Zermatt	

Friday, 20 June 2008

All sessions will be held in Matterhorn unless otherwise noted

07:15-08:00	Breakfast in Matterhorn Concourse	
08:00-09:00	Tutorial #3: Inverse Methods in Aeronomy	D. Hysell (Cornell)
09:00-09:15	New Atmospheric Networks: The Axonmet and O-QNet	W. Hocking (U WO)

09:15-09:25	Announcement of Poster Prize Winners	R. Doe, D. Janches, S. Shepherd (CSSC)
09:25-09:55	--- Break ---	
09:55-10:10	VITMO: The Virtual Observatory for the ITM Community	D. Morrison (APL/JHU)
10:10-10:25	The Electronic Geophysical Year - Accomplishments and Impacts on the ITM Community	E. Kihn (NGDC/NOAA)
10:25-10:45	IHY and ICESTAR Activities	A. Weatherwax (U MD)
10:45-11:00	Announcement of new CSSC Members and end of plenary sessions for CEDAR	R. Behnke (NSF) and J. Thayer (CSSC)
11:00-13:00	Lunch at Schneitter's (pay own) or on own	
11:00-13:00	CSSC Lunch (Basel)	
11:10-	Bus leaves Zermatt for south and north restaurants in Heber City	
12:35	Bus leaves south and north Heber City for Zermatt	
13:00-15:00	<ul style="list-style-type: none"> ▪ Outstanding Global Issues in Ionosphere Thermosphere Research II (Matterhorn) ▪ Poker Flat ISR I (Grindelwald) ▪ Cubesats - Science and systems workshop (Interlaken) ▪ CEDAR Science in Latin America (Davos) 	<ul style="list-style-type: none"> ▪ W. Bristow, R. Doe, J. Huba, L. Paxton, A. Ridley ▪ C. Heinselman ▪ D. Klumpar, G. Swenson ▪ C. Martinis, D. Janches
14:00	Bus leaves Zermatt for Utah Olympic Park. Tour 3-4 pm. \$7.00	
17:30	Bus leaves Olympic Park for Zermatt	
15:00-16:00	--- Break ---	
16:00-18:00	<ul style="list-style-type: none"> ▪ Poker Flat ISR II (Grindelwald) ▪ Lightning Effects on the Upper Atmosphere (Interlaken) ▪ Coupling of Atmospheric Regions during Stratospheric Sudden Warmings (Davos) 	<ul style="list-style-type: none"> ▪ J. Semeter ▪ N. Liu, M. Stanley, M. Taylor ▪ L. Goncharenko, H-L. Liu
	--- OR ---	
18:15 and 19:45	Bus departs Zermatt for Park City	
20:30 and 22:15	Bus departs Park City for Zermatt	

Saturday, 21 June 2008

07:15-08:00	Breakfast in Matterhorn Concourse	
08:00-10:00	<ul style="list-style-type: none"> ▪ AMISR Tutorial I (Matterhorn) ▪ Jicamarca and C/NOFS Amigos I (Grindelwald) ▪ New Understanding of Thermospheric Density and Composition Structure and Variability I (Interlaken) 	<ul style="list-style-type: none"> ▪ E. Kendall, A. Coster ▪ O. de la Beaujardiere, J. Chau, D. Hysell, D. Rowland ▪ J. Thayer, A. Richmond
10:00-10:30	---Break---	
10:30-12:30	<ul style="list-style-type: none"> ▪ AMISR Tutorial II (Matterhorn) ▪ Jicamarca and C/NOFS Amigos II (Grindelwald) ▪ New Understanding of Thermospheric Density and Composition Structure and Variability II (Interlaken) ▪ I-T Challenges Based on Continuous Observations Through the IPY (Davos) 	<ul style="list-style-type: none"> ▪ P. Erickson ▪ O. de la Beaujardiere, J. Chau, D. Hysell, D. Rowland ▪ J. Thayer, A. Richmond ▪ J. Sojka, A. van Eyken, C. Heinselman, J. Holt
12:30	CEDAR Workshop Adjourns	
12:45	Bus Leaves Zermatt for Colorado (box lunches provided)	
13:00	Free USU Bus leaves Zermatt for Salt Lake City Airport	
14:00-16:00	Resolute Bay ISR I (Matterhorn)	E. Donovan
16:00-16:30	---Break---	
16:30-18:30	Resolute Bay ISR II (Matterhorn)	J-P. St. Maurice

Sunday, 22 June 2008

06:00 and 09:00	Free USU Bus leaves Zermatt for Salt Lake City Airport	
09:00-11:30	NSF Workshop on Space Weather Models (Matterhorn)	
11:30-13:00	Lunch	
13:00-17:00	NSF Workshop on Space Weather Models (Matterhorn)	
	GEM-SHINE activities begin. Check at the registration desk for information.	