

Future Physics for Global Atmospheric Models
Mesa Lab Main Seminar Room and Damon Room

Tutorial Agenda

Monday, June 10

8:15	Bus departs from Hilton Garden Inn
9:00-9:45	Welcome/Introduction to Parameterization (Julio+Team)
9:45-10:30	Simplified/Idealized models (Brian Medeiros)
10:30-11:00	Break
11:00-11:45	CLUBB 1 (Vince Larson)
11:45-12:45	Lunch
12:45-1:30	CLUBB 2 (Vince Larson)
1:30-2:15	Deep Convection (Leo Donner)
2:15-2:45	Break - Damon Room
2:45-3:15	Practical intro: SCAM (Andrew Gettelman/John Truesdale)
3:15-5:00	1 st Practical session - Damon Room
5:15	Bus departs Mesa Lab to Hilton Garden Inn

Tuesday, June 11

8:15	Bus departs from Hilton Garden Inn
9:00-9:45	Gravity Wave drag (Julio Bacmeister)
9:45-10:30	Condensation across scales (Andrew Gettelman)
10:30-11:00	Break
11:00-12:30	Microphysics/aerosols/Chemistry (Andrew Gettelman)
11:45-12:30	CESM Diagnostics (Cecile Hannay/Dani Coleman)
12:30-1:30	Lunch
1:30-2:15	Practical intro: CLUBB cases (Andrew Gettelman/Vince Larson)
2:15-3:00	2 nd Practical session - Damon Room
3:00-3:30	Break - Damon Room
3:30-4:15	2 nd Practical session (cont.)
4:15-5:00	2 nd Practical session (cont.)
5:15	Bus departs Mesa Lab to Hilton Garden Inn

Wednesday, June 12

8:15am	Bus departs from Hilton Garden Inn
9:00-9:45	Radiation and Clouds (Gettelman/Conley)
9:45-10:30	Bringing it all together (Gettelman+Leo Donner+Team)
10:30-11:00	Break
11:00-12:15	Practical #3
12:15-12:30	Student comments/input/discussion
12:30-1:30	Lunch (Tutorial ends)

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Workshop Agenda

Wednesday, June 12

- 1:30-2:15 Intro/Goals/Historical Perspective (Leo Donner)
2:15-3:00 Parameterization in Climate Models (Peter Caldwell, LLNL)
3:00-3:30 **Break**
3:30-4:15 Parameterization in Weather Models: NWP (Jack Kain, NOAA)
4:15-5:00 Discussion
5:30-7:00 **Reception/Icebreaker/Information Exchange - Mesa Lab Cafe**
7:15 Bus departs Mesa Lab to Hilton Garden Inn

Thursday June 13th

TURBULENCE

- 8:15 Bus departs from Hilton Garden Inn
9:00-9:45 Waves & Drag (Julio Bacmeister)
9:45-10:30 Unified Turbulence (Joao Teixeira, NASA JPL)
10:30-11:00 **Break**
11:00-12:30 Deep Convection (Leo Donner)
11:45-12:30 Discussion: Clouds & Aerosols
12:30-1:30 **Lunch**

AEROSOLS/MICROPHYSICS

- 1:30-2:15 Microphysics (Greg Thompson, NCAR)
2:15-3:00 Aerosols (Ken Carslaw, U. Leeds)
3:00-3:30 **Break**
3:30-4:15 Discussion: Clouds & Aerosols
4:15-5:00 Discussion: Brainstorming/Synthesis: What's next?
5:15 Bus departs Mesa Lab to Hilton Garden Inn

Friday June 14th

BEYOND CURRENT APPROACHES

- 8:15 Bus departs from Hilton Garden Inn
9:00-9:45 Super and Ultra Parameterization (Mike Pritchard, UC Irvine)
9:45-10:30 Global Cloud Resolving Models (Falco Judt, NCAR)
10:30-11:00 **Break**
11:00-12:30 AI/Machine Learning (Tapio Schneider, Caltech)
11:45-12:30 Discussion: Beyond Current Approaches
12:30-1:30 **Lunch**
1:30-2:00 Student Synthesis & Questions: What does CAM do next?
2:00-2:30 Wrap up Discussion
2:45 Bus departs Mesa Lab to Hilton Garden Inn