

Workshop on
Fundamental Aspects of Geophysical Turbulence II
at NCAR 5-7 August 2015, Boulder, CO, U.S.A

Damon Room, NCAR Mesa Laboratory Meeting Agenda

Wednesday August 5

8:45-9:00 Opening remarks

9:00-9:55 James Riley
On the dynamics of turbulent/non-turbulence interfaces in stably-stratified fluids

10:00-10:55 Joseph Werne
*Parameter-dependent morphology in Kelvin-Helmholtz layers
and their implications for modeling stratified turbulence*

Coffee Break

11:20-12:05 Yukio Kaneda
Length scales in turbulent flows

Outdoor observations (a working lunch)

13:30-14:25 James McWilliams
*Oceanic submesoscale dynamics: Dense filament frontogenesis &
arrest by boundary layer turbulence*

14:30-15:25 Subhas Karan Venayagamoorthy
*A framework for the prediction of turbulent diapycnal mixing
in stably stratified geophysical flows*

Coffee Break

15:55-16:50 David Richter
How far upscale does a dispersed phase influence turbulence?

Reception Mesa Lab Cafeteria

18:30 **Bus departs for the hotel**

Thursday August 6

9:00-9:55 Peter Davidson
Planetary dynamos driven by helical waves

10:00-10:55 Boris Galperin
Turbulence and waves on a westward jet - an experimental study

Coffee Break

11:20-12:15 Stephen Belcher
The diurnal cycle of the ocean surface boundary layer

Outdoor observations (a working lunch)

13:30-14:25 Charles Meneveau
Synchronization of chaos in fully developed turbulence

14:30-15:25 Harm Jonker
The prediction horizon of convective boundary layers

Coffee Break

15:55-16:50 Gabriel Katul
Co-spectral budgets link energy distributions in eddies to bulk flow properties

18:30 **Dinner The Med**

20:30 **Bus departs for the hotel**

Friday August 7

8:45-9:40 John Finnigan
*Canopy-boundary layer coupling in convectively unstable flows:
A tale of interacting instabilities*

9:45-10:40 Andreas Muschinski
Optical turbulence: from first principles to working models

Coffee Break

11:00-11:55 Yoshiyui Tsuji
Large and small scale interaction of pressure in turbulent boundary layers

Outdoor observations (a working lunch)

13:10-14:05 Stephen de Bruyn Kops

*Classical scaling and intermittency in strongly stratified
Boussinesq turbulence*

14:10-15:05 Michael Waite
Physical- and eddy-viscosity effects in simulations of stratified turbulence

15:10-15:30 Esa-Matti Tastula
*Insights into the performance of the QNSE-EDMF scheme in
stable and unstable conditions*

End-of-Meeting

Up-the-hill-Refreshments Tree Plaza

17:00 **Bus departs for the hotel**