

Day 1: 12 November 2018, Tuesday; RSMAS Auditorium

- **08:00 - 09:00** Registration and breakfast
- **09:00 - 09:10** Tamay Özgökmen (University of Miami):
Brief history of CARTHE

Session-I:

- **09:10 - 09:30** Gregg Jacobs (Naval Research Laboratory):
Constrained scales in ocean forecasting
- **09:30 - 09:50** Shuyi Chen (University of Washington):
Synergistic review on coupled atmosphere-wave-ocean modeling and storm prediction over the Gulf of Mexico: a CARTHE story
- **09:50 - 10:10** Baylor Fox-Kemper (Brown University):
PV in LES
- **10:10 - 10:30** Alex Soloviev (NOVA University):
Observation and modeling of low-salinity lenses off the Louisiana coast

10:30 - 10:50 Coffee break

Session-II:

- **10:50 - 11:10** Jochen Horstmann (Helmholtz-Zentrum Geesthacht):
Bear Cut inlet - observations of the near surface vertical current shear
- **11:10 - 11:30** John Lodise (University of Miami):
Vertical structure of ocean surface currents revealed by the deconstruction of drogued and undrogued drifter velocities under high winds
- **11:30 - 11:50** Bjoern Lund (University of Miami):
Marine radar observations of vertically sheared currents during SPLASH
- **11:50 - 12:10** Milan Curcic (University of Miami):
Revised estimates of ocean surface drag in strong winds

12:10 - 13:30 Lunch

Session-III:

- **13:30 - 13:50** Darek Bogucki (TAMU-CC):
Turbulent dissipation under non-breaking waves - why do we care?
- **13:50 - 14:10** Mohamed Barzegar (TAMU-CC):
The response of the boundary layer to a weak forcing
- **14:10 - 14:30** Ming Shao (University of Miami):
Observations of high-frequency internal waves near fronts
- **14:30 - 14:50** Hanjing Dai (University of Miami):
Surface oil film effects on hydrodynamic properties of short wind-generated waves

14:50 - 15:30 Coffee break

Session-IV:

- **15:30 - 15:50** Jeroen Molemaker (UCLA):
Talk-1
- **16:00 - 16:20** Ramsey Harcourt (University of Washington):
Comparisons of 2-point velocity statistics and dispersion between the small-scale LASER observations and surface trajectories from Large-Eddy Simulations
- **16:20 - 16:40** Breanna Vanderplow (NOVA University):
Effect of surfactants on the generation of sea spray during tropical cyclones
- **16:40 - 17:00** Georgia Parks (NOVA University):
Microbial analysis of sea surface microlayer slicks in the Florida Keys in coordination with synthetic aperture radar imagery

17:00 - 18:30 Free discussions for collaboration, papers, synthesis

18:30 - 20:00 Reception

Day 2: 13 November 2018, Wednesday; RSMAS Auditorium

- **08:00 - 09:00** Breakfast

Session-V:

- **09:00 - 09:20** Andrew Poje (CUNY):

Comparison of submesoscale kinematic properties in four surface flows in the Northern Gulf of Mexico

- **09:20 - 09:40** Helga Huntley (University of Delaware):

Impact of position error on divergence and vorticity estimates from drifter trajectories

- **09:40 - 10:00** Henry Chang (University of Delaware):

Scale-dependent frontal dynamics from LASER

- **10:00 - 10:30** Baylor Fox-Kemper (Brown University):

Coastal predictability

10:30 - 11:00 Coffee break

Session-VI:

- **11:00 - 11:20** Jeroen Molemaker (UCLA):

Talk-2

- **11:20 - 11:40** Dan Carlson (Aarus University):

Applications of CARTHE technologies and methods to Greenland's proglacial marine ecosystems

- **11:40 - 12:00** Guillaume Novelli (University of Miami):

Drone-based measurements of surface convergence in the ocean boundary layer

- **12:00 - 12:20** Matt Grossi (University of Miami):

Predicting particle trajectories using artificial neural networks

12:20-13:30 Lunch

13:30 - 15:00 Free discussions for collaboration, papers, synthesis

15:00 - 15:30 Coffee and meeting adjourns