Warnemuende Turbulence Days 2021 International Virtual Workshop 6 – 9 December, 2021



Join here: https://uni-rostock-de.zoom.us/j/8423118312

	Mor	nday, 6 December	
	"Interfaces and to	urbulent boundary layers"	
09:30 - 10:00	Opening and workshop information		
	SESSIOI	N I "Internal waves"	
10:00 – 10:45	Manita Chouksey	On the existence and role of an interface between the slow and fast manifolds	
10:45 – 11:15	Lois E. Baker	Interaction of bottom generated oceanic lee waves with vertically varying background flows and the ocean	
11:15 – 12:45	break		
12:45 – 13:15	Carsten Eden	A closure for lee wave drag on the large-scale ocean circulation	
13:15 - 13:45	Kevin Lamb	Interaction of Internal Solitary Waves with Cores	
13:45 – 14:45	break		
	SESSION	II "Boundary mixing"	
14:45 - 15:20	Ali Mashayek	Mountains to climb: on the role of seamounts in	
14:45 – 15:30		upwelling of deep ocean waters	
15:30 – 16:00	Bieto Fernández Castro	Intense ocean mixing by fish spawning aggregations	
16:00- 16:30	break		
16:30 – 17:15	Matthew Alford	Turning upside down mixing upside down: observations of dye, turbulence and upwelling along a sloping	
17:15 – 17:45	Bethan Wynne-Cattanach	Diapycnal Upwelling in the Bottom Boundary Layer Observed by Dye Release	
17:45 – 18:15	Ole Pinner	The role of boundary mixing for diapycnal oxygen fluxes in a stratified marine system	
After 19:30 walk	around the island with invited	d speakers	

	1	Tuesday, 7 December
	SES	SSION III "Methods I"
10:00 – 10:30	Qing Li	Integrating CVMix into GOTM: a consistent framework for testing, comparing, and applying ocean mixing
10:30 - 11:00	Julia Muchowski	Remote Quantification of Turbulent Vertical Mixing in the Halocline using Broadband Acoustics
11:00 - 12:00	break	
	SESS	SION IV "OBL and PBL"
12:00 – 12:45	Yaron Toledo	Surface waves propagation on irrotational, inviscid and turbulent currents - theory and measurement
12:45 - 13:15	Stefan Heitmann	Skew-normal Turbulence Modelling for Convective PBLs
13:15 – 14:15	break	
14:15 – 14:45	Johannes Becherer	The role of turbulence in fueling the subsurface chlorophyll maximum in tidally dominated shelf seas
14:45 – 15:15	Jeff Carpenter	Towards a quantification of wind-wave growth mechanisms
15:15 – 16:15	Break (walk around the island)	
16:15 – 17:00	Sutanu Sarkar	The multiscale response of the turbulent ocean boundary layer to unsteady atmospheric forcing: LES case studies
17:00 – 17:30	Jen-Ping Peng	Submesoscale frontal dynamics and turbulence under theoretically unfavorable conditions for symmetric instability
17:30 – 18:00	Simone Zazzini	Lagrangian investigation of turbulent dispersion in the Ocean Surface Boundary Layer

Wednesday, 8 December					
10:00	Morning walk around the island?				
SESSION V "Arctic Mixing"					
12:00 – 12:30	Josephine Anselin	The effect of tidally-induced turbulence on sub-ice shelf basal melting based on one-dimensional plume			
12:30 – 13:00	Hans Burchard	The vertical structure and entrainment of subglacial melt water plumes			
13:00 – 14:30	Joint walk around the isla	nd			
14:30 – 15:00	Markus Reinert	High-resolution modelling of ice-covered glacier fjords in Greenland			
15:00 – 15:30	Kirstin Schulz	Boundary layer and interior region exchange at high latitudes			
15:30 – 16:00	break				

	Wedne	esday, 8 December
		N VI "Methods II"
	VEPOSSSS	"Waves and flows on a coral reef beach and in the
16:00 – 17:00	https://www.vepossss.eu/	adjoining lagoon"
•	- Stephen Monismith -	(https://uni-rostock-de.zoom.us/j/65959396087)
17:00 - 17:30	Giyora Hasson	HF-radar remote sensing of ocean surface current shear using first order Bragg peaks
17:30 – 18:00	Dylan Schlichting	Using salinity variance to quantify numerical mixing offline in a coastal ocean model
	Thurs	sday, 9 December
	SESSION VII "Est	tuaries and coastal ocean"
11:00 – 12:00	Alexander Yankovsky	Cross-shelf propagation of supercritical buoyant plumes driven by upwelling winds
12:00 – 12:30	Berkay Basdurak	A local eddy viscosity parameterization for wind-driven estuarine exchange flow
12:30 - 13:30	break	-
13:30 - 14:00	Robert Hetland	Tracer variance mixing in simple box models
14:00 - 14:30	Yunzhu Yin	Wave induced forces across through the German coasts
14:30 – 15:00	Break	
15:00 – 15:30	Marvin Lorenz	Mixing in a marginal sea with dominant evaporation: the Persian Gulf
15:30 – 16:30	Julie Pietrzak	Multiple tidal plume fronts, internal waves, mixing and sediment resuspension in a near to mid-field river
16:30 – 17:00	Closing (organisers)	
End of workshop)	

Organization:

Prof. Dr. Hans Burchard

(Leibniz-Institute for Baltic Sea Research Warnemünde)

Prof. Dr. Carsten Eden

(Institute of Oceanography, University of Hamburg)

PD Dr. Lars Umlauf

(Leibniz-Institute for Baltic Sea Research Warnemünde)