

CSIRO/COSNet Workshop Canberra, The Australian National University, 10-13 January 2006

"Turbulence and Coherent Structures in Fluids, Plasmas and Granular Flows"

	Tuesday 10 January	Wednesday 11 January	Thursday 12 January	Friday 13 January
8:30 – 9:00, 8:45-9:00	Registration Opening remarks			
9:00 – 10:00	W. David McComb Two-point turbulence closures revisited	Henk A. Dijkstra Regimes of the wind-driven ocean circulation	Tom Mullin Finite-dimensional Dynamics in Taylor-Couette Flow	Javier Jimenez What do we learn from simulating wall turbulence
10:00 – 10:40	Jorgen Frederiksen Turbulence Closures and Subgrid-scale Parameterizations	Andrew McC. Hogg Low Frequency Ocean Variability: Feedbacks Between Eddies and the Mean Flow	Jim Denier Developments in the stability of non-planar fluid flows	Min Chong High Reynolds Number Turbulent Boundary Layer
10:40 – 11:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:00 – 11:40	Terence J. O'Kane Ensemble prediction and the statistical dynamics of two-dimensional inhomogeneous turbulent flow regimes	Carsten Frederiksen Coherent patterns of interannual variability of the atmospheric circulation	Frank Jenko Emergence of Streamers in Plasma Microturbulence	Open discussion Summary and conclusions
11:40-12:20	Rowena Ball Distilled turbulence	Meelis Zidikheri Multiple Equilibria and Mid-latitude Atmospheric Blocking: a re-examination	Hua Xia Spectral transfer analysis in plasma turbulence studies	
12:20 – 2:00	LUNCH	LUNCH	LUNCH	
2:00 – 3:00	Anton S. Desyatnikov Vortex flows in optical fields: an overview	Gregory Falkovich Entropy production and fractal measures far from equilibrium	John A. Krommes Transition to Collisionless ITG Plasma Turbulence	
3:00 – 3:40	Michael Borgas Maximum Entropy N-Particle Lagrangian Clusters in Turbulence	Andrew Kiss Nonlinear resonance and chaos in an ocean model	Robert L. Dewar Modulational instability of drift-type waves in magnetized plasmas	
3:40-4:00	Coffee Break	Coffee Break	Coffee Break	
4:00-4:40	Shin-itiro Goto Lyapunov exponents and macroscopic variables from a periodic orbit in classical Hamiltonian systems	Jonathan Watmuff Coherent structures generated by a synthetic jet	Ryusuke Numata Nonlinear Simulation of Drift-Wave Turbulence	
4:40-5:20	Michael Borgas Lagrangian formalism for scalar fluctuations with an exact derivation of the Batchelor conduction spectrum	Lennaert van Veen Periodic motion vs. turbulent motion: scaling laws, bursting and Lyapunov spectra	R. Ganesh Coherent structures in toroidal electron plasmas: simulation and experiments	
			WORKSHOP DINNER ~7PM	