

The Dynamics of Rotating Fluids, Friday 4 January 2019

Theme: “Fluid dynamics of the oceans: from the sub-mesoscale to the planetary scale”

A meeting on the above theme will be held on Friday 4 January 2019 in Room 500 (5th Floor of Mathematics / Students Union building). (*) = Invited speaker (UK fluids network, special interest group “Multi-scale processes in geophysical fluid dynamics”). The programme is as follows:

11.00am (*) Laure Zanna (Oxford)

Energizing turbulence closures in ocean models

11.35am Laura Cope (Cambridge)

Variability of stochastically forced zonal jets

11.55pm Josephine Park (Imperial)

Parameterising eddy-induced oceanic transport in an idealised meandering jet

12.15pm LUNCH

1.00pm (*) Fabien Roquet (Gothenburg)

Near-zero thermal expansion of cold seawater key to the formation of sea ice on Earth

1.35pm Remi Tailleux (Reading)

Salty potential vorticity, thermobaricity, and the spiciness mode in the oceans

1.55pm Elnaz Naghibi (Queen Mary)

Fast spectral solutions of the double-gyre problem in a turbulent flow regime

2.15pm (*) Marina Lévy (Paris Sorbonne)

The role of sub-mesoscale currents in structuring marine ecosystems

2.50pm TEA / COFFEE

3.10pm (*) Leo Maas (Utrecht)

Waves in rotating fluids

3.45pm Eugene Benilov (Limerick)

The mystery of long-lived oceanic vortices: the solution to the problem

4.05pm Vladimir Zeitlin (LMD)

On the dynamical “backbone” of the Madden-Julian Oscillation

4.25pm (*) Jacques Vanneste (Edinburgh)

Inertia-gravity wave scattering by geostrophic turbulence

5.00pm Mike Cullen (Met. Office)

Weak solutions of geophysical equations and their physical significance

5.20pm Close

Maps of the UCL site and surrounding area can be found at <http://www.ucl.ac.uk/maps>. All are welcome. Further details can be obtained by e-mailing Gavin Esler: j.g.esler@ucl.ac.uk. Please feel free to forward this to anyone who may be interested.