Stratified turbulence in the 21st century – new insights on an increasingly important problem
Monday 21 – Tuesday 22 March 2016 | The Royal Society at Chicheley Hall, home of the Kavl Royal Society Centre
Organised by: Professor Paul Linden FRS, Professor Richard Kerswell FRS, Dr Colm-cille Caulfield, Dr Stuart Dalziel and Dr John Taylor

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<td><strong>Chair Colm-cille Caulfield</strong></td>
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| 09.00 Welcome by the Royal Society and scientific organisers | Predrag Cvitanović  
Periodic orbits theory of turbulent flows | Ross Griffiths  
Experiments with mixing in stratified flow over a ridge | Sutanu Sarkar  
From topographic internal gravity waves to instabilities and turbulence |
| 09.05 Jennifer MacKinnon  
Stratified turbulent mixing in the ocean: patterns, processes, and parameterisation | 13.10 Philip Marcus  
The zombie vortex instability – a new, fast, robust instability in rotating, horizontally-shearing, vertically-stratified flows | 9.00 Henrik Alfredsson  
Rotating plane Couette flow – instabilities, structures and turbulence | 13.10 W Richard Peltier  
Flavours of stratified turbulence |
| 09.40 Greg Ivey  
Mixing in density-stratified, free shear flows and the implications for mixing in the ocean | 13.50 James Riley  
The turbulent/non-turbulent interface in stably stratified fluids | 09.40 Thomas Mullin  
Transition in unstratified pipe flow | |
| 10.20 Tea | 14.30 Coffee | 10.20 Tea | 14.30 Coffee |
| 10.50 Sonya Legg  
Parameterising mixing in the stably stratified ocean interior | 15.00 Roberto Camassa  
Mixing and critical entrainment phenomena in stratified fluids | 10.50 Tim Palmer FRS  
Stochastic parametrisation and inexact computing for weather and climate prediction | 15.00 Pascale Lelong  
Near-inertial energy propagation inside an anticyclone: a pathway to stratified turbulence |
| 11.30 Simon Bittleston  
Mixing processes in the oil and gas industry | 15.40 Discussion | 11.30 Discussion | |
| 12.10 LUNCH | 17.00 CLOSE | 12.10 LUNCH | 17.00 CLOSE |

_Draft programme correct as of 15/03/16 – subject to change_