

**Atelier "Représenter les degrés de liberté non résolus dans
l'atmosphère et l'océan"
2-4 mars 2005**

***Workshop "Representing Unresolved Degrees of Freedom for the
Atmosphere and Ocean"
March 2-4, 2005***

Programme / Schedule

**Salle de conférences / Lectures Room
6214**

Le mercredi 2 mars / Wednesday, March 2

A. Majda, Chair

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| 09 :00 | Inscription / Registration (Salle / Room 5345) |
| 09:30 - 10:30 | A Majda
<i>"Waves, PDE's and Multi-scale modeling for the Tropics"</i> |
| 10:30 - 11:00 | Pause-café / Coffee break (Salle / Room 6245) |
| 11:00 - 12:00 | T. Shepherd
<i>Parameterizing the effects of gravity waves in the middle atmosphere"</i> |
| 13:30 - 14:30 | W. Grabowski
<i>"Super-parameterization: Global context for cloud-scale processes"</i> |
| 14:30 - 15:30 | G. Branstator
<i>"Representing Truncated Structures in Simple Planetary Wave Models"</i> |
| 15:30 - 16:00 | Pause-café / Coffee break (Salle / Room 6245) |

16:00 - 17:00 *"Surface Exchange Fluxes"*

16:00 **A. Monahan**
" Stochastic Dynamics of Sea Surface Winds

16:30 **D. Holland**
An Impact of Subgrid-Scale Ice-Ocean Dynamics on Sea-Ice Cover

17 :00 Cocktail / Reception (Salle / Room 6245)

Le jeudi 3 mars / Thursday, March 3

09:00-10:30 *"Turbulence"* – T. Shepherd, Chair

09:00 **John Bowman**
Mode Reduction Schemes and Subgrid Models for Homogeneous Turbulence "

09:30 **Tim Delsole**
"Statistics of Optimal Perturbations in Quasigeostrophic Turbulence"

10:00 **David Straub**
"Aspect ratio effects in quasi-2D turbulence"

10:30 - 11: 00 Pause-café / Coffee break (Salle / Room 6245)

11:00 - 12:30 *"Moist Convection"* – W. Grabowski, Chair

11:00 **George Craig**
"Equilibrium Statistical Mechanics of Moist Atmospheric Convection"

11:30 **Boualem Khouider**
"Coarse grained stochastic model for tropical deep convection"

12:00 **Markos Katsoulakis**
"Mathematical and computational strategies for hybrid stochastic/deterministic systems"

14:00 - 15:30 **"Low. Freq. Var. I"** – G. Branstator, Chair

14:00 **G. Vallis**

"Let the equations do the work: non-hydrostatic convection at large scales"

14:30 **C. Franzke**

"Systematic Reduced Stochastic Climate Models of Atmospheric Low-Frequency Variability"

15:00 **I. Timofeyev**

"Underlying deterministic dynamics in noisy systems"

15:30 - 16:00 Pause-café / Coffee break (Salle / Room 6245)

Le vendredi 4 mars / Friday, March 4

09:00 - 10:30 **"Low. Freq. Var. II"** – G. Branstator, Chair

09:00 **P. Kushner**

"The coupled stratosphere-troposphere response to impulsive forcing from the troposphere"

09:30 **B. Turkington**

"Nonequilibrium statistical behavior of a nonlinear dispersive wave system"

10:00 - 10:30 Pause-café / Coffee break (Salle / Room 6245)

10:30 - 12:00 **"Waves and Mean Flows"**

10:30 **L. Campbell**

"Gravity wave drag parameterization in simulations of the quasi-biennial oscillation"

11:00 **P. Bartello**

"Waves and vortices in stratified turbulence with little or no rotation"

11:30 **O. Bühler**

"Wave capture and wave-vortex duality for internal gravity waves"

2005-02-23
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