



**Welcome
to the 2019 LMDZ training course!**

9/10/11 December 2019 – LMD Jussieu

The program (1/3)

Monday

9:00-9:30	Welcome and Introduction (L. Fairhead)
9:30-10:15	General presentation to LMDZ (F. Hourdin)
10 :15-11:30	Code structure, installing the model Tutorial 1 (I. Musat / L. Fairhead)
11:30-11:50	Coffee break
11:50-12:20	Students presentation (1 slide for each)
12:20-12:55	Outputs (L. Fairhead)
12:55-14:00	Lunch
14:00-14:30	Code management (L. Fairhead)
14:30-17:00	Tutorial 1: different versions of the model, aquaplanet, sensitivity tests

The program (2/3) Tuesday

- 9:00-11:00 Model physics : - Terrestrial physics (M. Bonazzola / F. Hourdin)
- Planetary physics (E. Millour)
- 11:00-11:20 Coffee break
- 11:20-11:50 Configurations/input files/forcings (L. Guez)
- 11:50-12:20 Aerosols (O. Boucher)
- 12:20-12:50 LMDZ1D (M.-P. Lefebvre)
- 12:50-14:00 Lunch
- 14:00-15:00 Clouds (J-B Madeleine)
- 15:00-15:20 Presentation of tutorial N°2 (A. Sima)
- 16:15-17:30 Tutorial N°2: Mandatory part + options (zooming, nudging, tracers, Orchidee, 1D, XIOS,parallelism, physics)

The program (3/3)

Wednesday

- 9:00-10:30 Dynamics: grid/temporal discretization/stability/diffusion (E. Millour)
- 10:30-10:50 Coffee break
- 10:50-11-50 Atmosphere/surface interface (F. Cheruy)
- 11:50-12:20 Parallelism (E. Millour)
- 12:15-13:15 Tutorial N°2
- 13:15-14:15 Lunch
- 14:15-15:45 LMDZ configurations: uses and tuning (F. Hourdin)
- 15:45-17:00 Tutorials (end)

All the presentations and tutorials texts are/will be on LMDZ website
(<http://lmdz.lmd.jussieu.fr/le-projet-lmdz/formation/2019>)

Who are we?



Marine BONAZZOLA

Enseignant-chercheur UPMC

Orography



Jean-Yves GRANDPEIX

Collaborateur bénévole

Physical package



Marie-Pierre LEFEBVRE

Ingénieure Météo-France

1D model



Frédéric HOURDIN

Chercheur CNRS

LMDZ configurations



Jean-Baptiste MADELEINE

Enseignant-Chercheur SU

Clouds, physical package



Laurent FAIRHEAD

Ingénieur de recherche CNRS

input/output, model versions



Ionela MUSAT

Ingénieure de recherche CNRS

Code structure, install model



Ehouarn MILLOUR

Ingénieur de recherche CNRS

Dynamics, parallelism



Adriana SIMA

Ingénieure de recherche CNRS

Presentation of tutorials



Lionel GUEZ

Ingénieur de recherche CNRS

input files, forcings



Olivier BOUCHER

Chercheur CNRS

Aerosols



Nicolas ROCHETIN

Enseignant -chercheur ENS

Convection, physical package



Frédérique CHERUY

Chercheur CNRS

Atmosphère/surface interface

Who are you?

31 participants including 15 PhDs, 7 postdocs, 9 researchers and engineers

Laboratories: LMD or visitors(15), IPSL and its laboratories (9), Univ Genève (2), CNRM (1), IGE (1), IUMP6 (1), OCA (1), Univ. Lomé (1)

21 of you “don't currently use LMDZ”.

Main topics:

- **Regional model**: Poles 2, cryosphere/Himalaya 1, Morocco 1
- **Coupling** : 1
- **Sensitivity of model** : 2
- **Isotopes** : 1
- **Emissions** : 1
- **Paleoclimate** : 1
- **Other planets (solar system and exo)** : 6
- **Primitive Earth** : 1
- **Tuning of the model** : 2
- **Curiosity / how it works** : 4
- **Global chemistry-climate simulations** : 1
- **Comparisons to observations** : 1
- **COSP** : 1

Some technical details ...

30 new laptops bought through ANR Convergence and Labex IPSL !

They are all identical.

User : util1

Passwd: !litu@upmc

The only directory useful for you is **LMDZ** and all others you are going to create .

To save paper: we will print presentations on request only.

Reminder: presentations are available at this adress:

<https://lmdz.lmd.jussieu.fr/utilisateurs/formation/2019>

For PhD students: We can provide you a certificate of attendance (ask Marie-Pierre).

Logistics

Lunch:
Restaurant
Administratif

Campus map



LMD/IPSL (T45-55,
2nd floor, room 201)

Questions: Marie-Pierre Lefebvre