

LMDZ Training January 2023



Welcome to the LMDZ 2023 training session

Information link :

<https://lmdz.lmd.jussieu.fr/utilisateurs/formation/2023>

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Tuesday 10th January :

- 9:00-9:30 Welcome and Introduction (L. Fairhead)
- 9:30-10:15 General presentation to LMDZ (F. Hourdin)
- 10:15-10:45 Students presentation (1 slide for each)
- 10:45-11:00 **Coffee break**
- 11:00-12:15 Installing the model, Code structure. Tutorial 1 (I. Musat, L. Fairhead)
- 12:15-12:45 LMDZ1D (E. Vignon)
- 12:45-14:00 **Lunch**
- 14:00-14:30 Outputs (A. Idelkadi)
- 14:30-17:30 Tutorial 1

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Wednesday 11th January :

- 9:00-11:00 Model physics: (F. Hourdin et al.)
- 11:00-11:20 **Coffee break**
- 11:20-11:50 Parallelism (E. Millour)
- 11:50-12:20 Aerosols (O.Boucher)
- 12:20-12:50 Input files, forcing data (L. Guez)
- 12:50-14:00 **Lunch**
- 14:00-17:30 Tutorial N°2: Presentation (A.Sima), mandatory part
+ 1D + nudging + ORCHIDEE + tracers
+ aerosols + parallel + XIOS

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Thursday 12th January :

- 9:00-10:30 Dynamics: grid / temporal discretization / stability / dissipation (E. Millour)
- 10:30-10:50 **Coffee break**
- 10:50-11-50 Atmosphere/surface interface (F.Cheruy)
- 11:50-12:20 Clouds (J-B Madeleine)
- 12:20-13:15 Code environment (L. Fairhead)
- 13:15-14:15 **Lunch**
- 14:15-15:45 LMDZ configurations: uses and tuning (F. Hourdin)
- 15:45-17:00 Practical session

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Frédéric Hourdin
Chercheur CNRS
physics / configurations



Jean-Yves Grandpeix
Chercheur bénévole
tutorials



Laurent Fairhead
Ingénieur CNRS
code / environment



Ionela Musat
Ingénieure CNRS
installation



Olivier Boucher
Chercheur CNRS
Aerosols



Abderrahmane Idelkaki
Ingénieur CNRS
outputs

Who are we ?



Jean-Baptiste Madeleine
Enseignant Chercheur SU
physics



Lionel Guez
Ingénieur CNRS
inputs/forcings



Etienne Vignon
Chercheur CNRS
1D



Ehouarn Millour
Ingénieur CNRS
Dynamics/parallelism



Adriana Sima
Ingénieure CNRS
tutorials



Frédérique Cheruy
Chercheur CNRS
**Atmosphere/surfaces
interface**

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Who are you ?

30 participants including 17 PhDs, 6 postdocs, 5 researchers, 2 engineers

Laboratories: IPSL (22), Paris (IAP), Toulouse, Grenoble, Italy, Denmark, Morocco, Switzerland

20 of you “don't currently use LMDZ”.

Topics of interest

Physical parametrisations of LMDZ, dynamical processes, isotopes, study of pollution, regional climates, past climates, exoplanets, mars atmosphere, polar climate, extreme heatwaves, atmospheric chemistry, climate impacts, vegetation and dust-cycles, improvements of parametrisations and modeles, aerosols, the water cycle, tuning and model evaluation, climate of mountainous regions, downscaling, ...

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Practical details

Lunch : taken in the university cafeteria, we'll provide you with tickets

Coffee breaks : in the classroom

For PhD students: we can provide you a certificate of attendance

Information link :

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mattermost channel : « #LMDZ Training session 2023 » on LMDZ mattermost:
link : <https://mattermost.lmd.ipsl.fr/lmdz/channels/lmdz-training-session-2023>

