

LMDZ Training January 2024



Welcome to the LMDZ 2024 training session

Information link :

<https://lmdz.lmd.jussieu.fr/utilisateurs/formation/2024>

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Tuesday 9th 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 Input files (L. Guez, L. Fairhead)
- 12:45-14:00 **Lunch**
- 14:00-14:30 Outputs (A. Idelkadi)
- 14:30-17:30 Tutorial 1

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Wednesday 10th January :

- 9:00-9:300 Code ecosystem (L. Fairhead)
- 9:30-11:00 Model physics: (F. Hourdin et al.)
- 11:00-11:20 **Coffee break**
- 11:20-11:50 Parallelism (E. Millour)
- 11:50-12:20 LMDZ1D (E. Vignon)
- 12:20-12:50 Aerosols (O.Boucher)
- 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 11th 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.Chery)
- 11:50-13:15 Model physics (J-B Madeleine et al)
- 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 ?

35 participants including 12 PhDs, 8 postdocs, 11 researchers, 3 engineers, 1 journalist
Laboratories: IPSL, Paris (Saclay, ENS,), Toulouse, Grenoble, Albi, Compiègne, China, India, Chile
27 of you “don't currently use LMDZ”.

Your interests

Multiple : physical parametrisations of LMDZ, dynamical processes, land-surface processes, icesheet models, arctic/antartic use, paleoclimates, running sensitivity experiments, regional climate, source inversion, tracer transport, regional study of GHG sources and sinks, convection, organization of convection, study of ocean, Mars photochemistry, learning the tool LMDZ and discuss potential uses ...

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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

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mattermost channel : « #LMDZ Training session 2024 » on LMDZ mattermost:
link : <https://mattermost.lmd.ipsl.fr/lmdz/channels/lmdz-training-session-2024>