

# LMDZ Training December 2021



**Welcome to the LMDZ 2021 training session**

**Information link :**

**<https://lmdz.lmd.jussieu.fr/utilisateurs/formation/2021>**

# LMDZ Training December 2021



## Format :

Due to sanitary conditions

- the 'formal' presentations will be given online through GoToMeeting with questions on shared doc please

link : [https://pad.colibris-outilslibres.org/p/Formation\\_LMDZ\\_2021](https://pad.colibris-outilslibres.org/p/Formation_LMDZ_2021)

- Practical work : most presentations have some practical work. 2 tutorials have been prepared. Tutorial 1 should be done in full and you can work on it through the session. Tutorial 2 is more of a starting point for your questions and projects. The practical work will be done on the gather.town link :

<https://gather.town/app/dounBToM8YBQ0e5I/labLMDZ>

# LMDZ Training December 2021



## Wednesday 8<sup>th</sup> December :

- 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
- 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, forcing data (L. Guez)
- 12:45-14:00 Lunch
- 14:00-14:30 Outputs (L. Fairhead)
- 14:30-17:30 Tutorial 1

# LMDZ Training December 2021



## Thursday 9<sup>th</sup> December :

- 9:00-11:00 Model physics:
  - terrestrial physic
  - physics of other planets
- 11:00-11:20 Coffee break
- 11:20-11:50 Parallelism (E. Millour)
- 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)
- 15:00-17:30 Tutorial N°2

# LMDZ Training December 2021



## Friday 10<sup>th</sup> December :

- 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 Code management (L. Fairhead)
- 12:20-13:15 Practical session
- 13:15-14:15 Lunch
- 14:15-15:45 LMDZ configurations: uses and tuning (F. Hourdin)
- 15:45-17:00 Practical session

# LMDZ Training December 2021



Who  
are  
we ?



**Jean-Yves GRANDPEIX**  
Collaborateur bénévole

**Tutorials**



**Marie-Pierre LEFEBVRE**  
Ingénieure Météo-France

**1D model**



**Frédéric HOURDIN**  
Chercheur CNRS

**LMDZ configurations/  
physics**



**Jean-Baptiste MADELEINE**  
Enseignant-Chercheur SU

**Clouds**



**Laurent FAIRHEAD**  
Ingénieur de recherche CNRS

**input/output, environment**



**Ionela MUSAT**  
Ingénieure de recherche CNRS

**Tutorials**



**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**



**Etienne VIGNON**  
Chercheur CNRS

**Tutorials**



**Frédérique CHERUY**  
Chercheuse CNRS

**Atmosphère/surface interface**

# LMDZ Training December 2021



## Who are you ?

37 participants including 20 PhDs, 6 postdocs, 7 researchers, 3 engineers, 1 Master student  
Laboratories: IPSL (23), Reims, Toulouse, Bordeaux, Paris, Chile, China, India, Senegal, Switzerland

31 of you “don't currently use LMDZ”.

## Topics of interest

Indian space program, ice sheets and health impacts, extreme events over West Africa, isotopes, planetary generic model, boundary layer and orographic waves, modelling of dust concentrations and impact on air quality over West Africa, Antarctic climate and meteorology, impact of climate change and urbanization on hydrology of basins, variability of upper atmosphere of Mars, carbon-climate feedbacks in the IPSL-ESM, machine learning for climate modelling, modelling plant hydraulics, climate and storms on Uranus and Neptune, model bias, habitability of planets, planetary studies, dynamics of atmospheric blocking

# LMDZ Training December 2021



## Practical details

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

**Information link :**

<https://lmdz.lmd.jussieu.fr/utilisateurs/formation/2021>

**slack channel** #formation-2021 on LMDZ slackspace :

invite : [https://join.slack.com/t/lmdz/shared\\_invite/zt-z3yjbzhh-sqxGDzZrDRk~d0ki8KKwkA](https://join.slack.com/t/lmdz/shared_invite/zt-z3yjbzhh-sqxGDzZrDRk~d0ki8KKwkA)

channel : <https://lmdz.slack.com/archives/C02N69F3B27>

**Gather.town link :**

<https://gather.town/app/dounBToM8YBQ0e5I/labLMDZ>

**Link to pad for questions :**

[https://pad.colibris-outilslibres.org/p/Formation\\_LMDZ\\_2021](https://pad.colibris-outilslibres.org/p/Formation_LMDZ_2021)





# LMDZ Training December 2021



**BACK AT 10:55 (Paris time)  
for group photo**

**Information link :**

<https://lmdz.lmd.jussieu.fr/utilisateurs/formation/2020>

**slack channel #formation-2020 on LMDZ slackspace :**

invite : [https://join.slack.com/t/lmdz/shared\\_invite/zt-jyc2tgjk-EK8U2DnSk7HVJM3yDeeLbA](https://join.slack.com/t/lmdz/shared_invite/zt-jyc2tgjk-EK8U2DnSk7HVJM3yDeeLbA)

[https://join.slack.com/t/lmdz/shared\\_invite/zt-jyc2tgjk-EK8U2DnSk7HVJM3yDeeLbA](https://join.slack.com/t/lmdz/shared_invite/zt-jyc2tgjk-EK8U2DnSk7HVJM3yDeeLbA)

**Gather.town link :**

<https://gather.town/app/dounBToM8YBQ0e5I/labLMDZ>

# LMDZ Training December 2021



**Please fill out the evaluation form here :**

<https://www.lmd.jussieu.fr/sondage/evaluation-form-for-the-2020-lmdz-training-course/>

**Thanks !**

**Most of us are here :**

<https://gather.town/app/dounBToM8YBQ0e5I/labLMDZ>

# LMdz Training December 2021



**Thank you for attending !  
Be safe**

**!!!! Happy Holidays !!!!**

**Don't forget the evaluation form here :**

<https://www.lmd.jussieu.fr/sondage/evaluation-form-for-the-2021-lmdz-training-course/>

