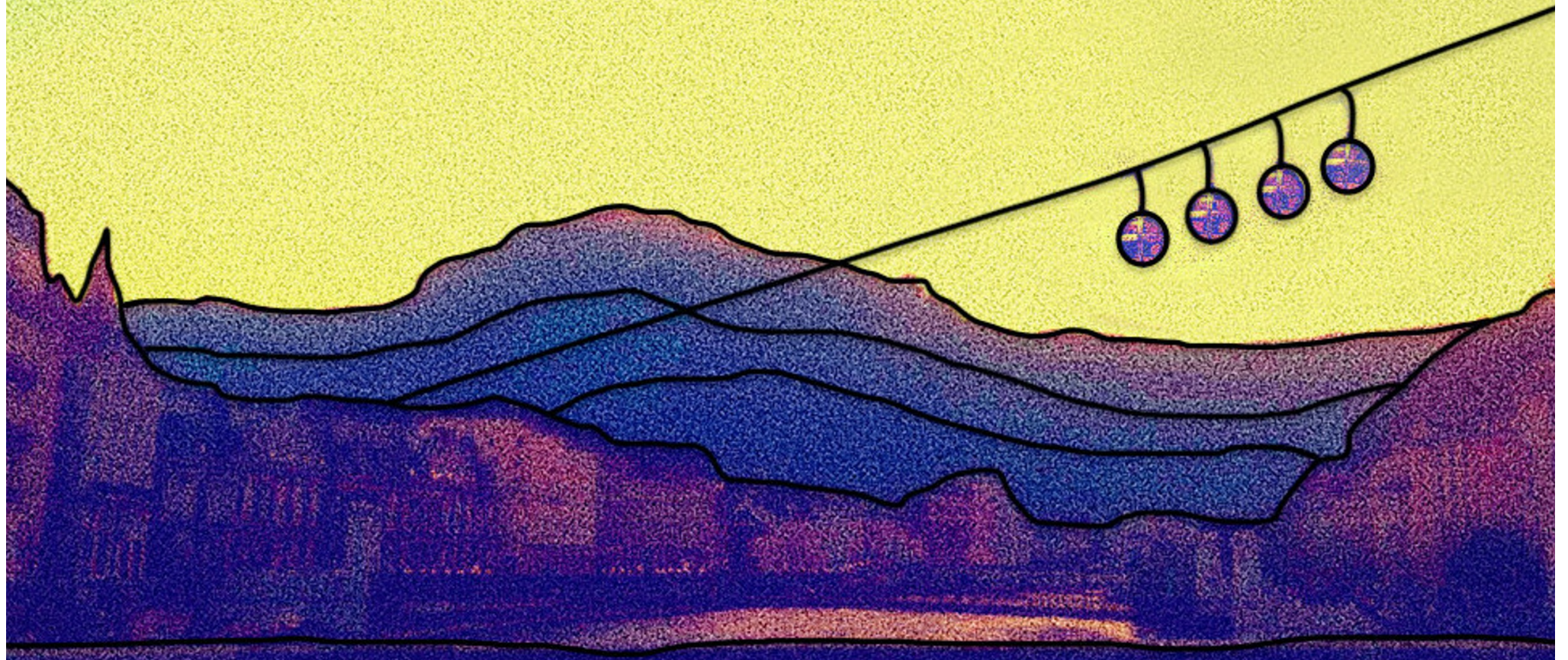


# mm Universe 2023

3rd edition · 26-30 June 2023

LPSC Grenoble · France



# **Welcome in Grenoble**

and at LPSC

Laboratory for Subatomic Physics and Cosmology

CNRS & Université Grenoble Alpes (UGA)

## 95 talks !

- mm Cosmology (CMB & clusters)
- Thermal & kinetic SZ
- Galaxy cluster physics (SZ, X, visible)
- Galaxy formation in the early Universe
- Nearby galaxies
- Galactic star formation
- From dust to planets
- mm instruments
- Simulations
- ...

## To all speakers

Please

- upload your slides on indico
- if it doesn't work, send them to me
- keep at least 5 minutes for questions  
in your allocated time-slot

## Local Organizing Committee

A. Catalano

M. Muñoz-Echeverría

D. Cherouvrier

J. Paquien

C. Hanser

L. Perotto

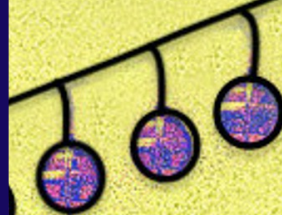
J. F. Macías Pérez

S. Savorgnano

F. Mayet (chair)

C. Vannier

A. Moyer



## Local instructions

- Entrance is at the main gate

*Wearing your mm Universe badge will accelerate the process*

- Main gate closes at 2:30 pm (except today)

*You should enter before...*

- To exit LPSC: use the door just below the stoop.
- LPSC is a restricted area

*You should not wander around...*

# Rooms

- Sessions will take place in
  - the amphitheatre
  - room 9
- Room labelled « Grande salle du conseil »  
is available all day long if you need to work..

# Coffee Breaks and Lunches

Coffee breaks & lunches will be served at LPSC

in the room downstairs (*Cafeteria*)

(just follow the signs)

Lunches also include vegetarian menus.



## Conference reception, dinner & Picture

- Tuesday 12:00: conference picture in front of LPSC
- Wednesday 06:00 pm : conference reception (@ LPSC)
- Wednesday 08:00 pm : conference dinner  
*if you have paid for it ...*

at the restaurant *le Bouillon A* (2 tram stops from LPSC)

*no choice in the event* → *vegetarian menu*

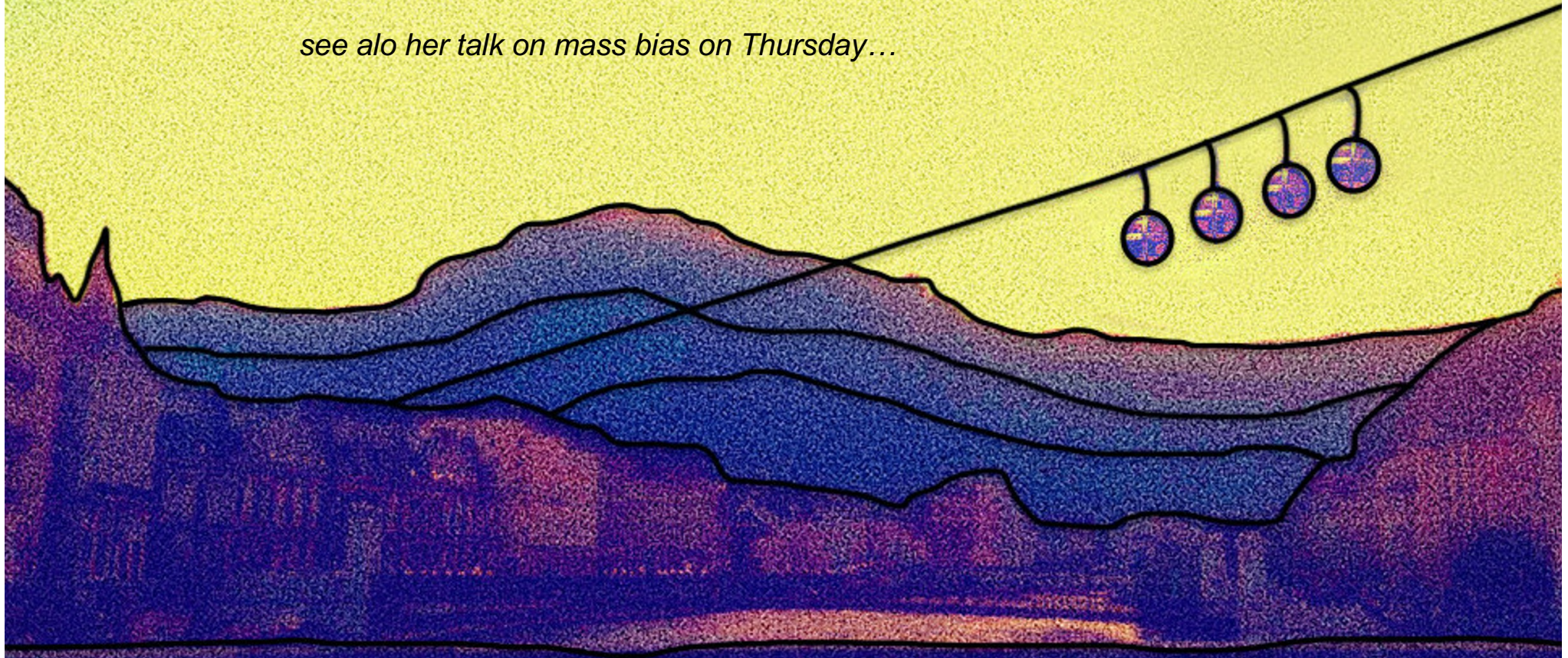
# Wifi

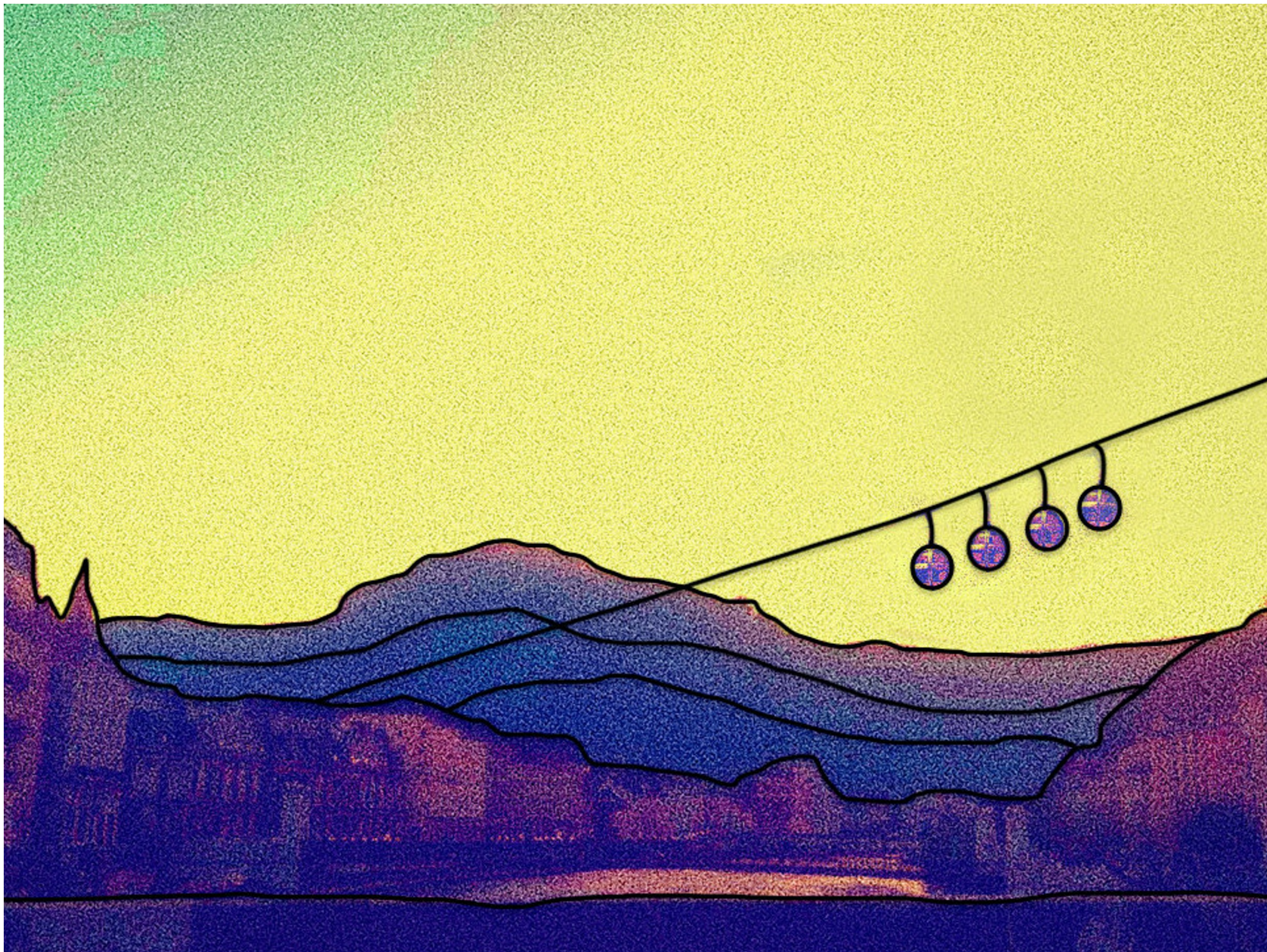
- Eduroam (*best choice*)
- LPSC-GUEST

→ choose the name of one of the LOC members

mm Universe poster, goodies and so on  
include an original artwork by  
Miren Muñoz-Echeverría

*see alo her talk on mass bias on Thursday...*





# Proceedings

The conference proceedings  
will be published in Web Of Conferences  
in the European Physical Journal

<http://www.epj-conferences.org>

Deadline: 15/9/2023

*More details will be given later*

# Conference series

mm Universe is a conference series created in 2019 at LPSC.

The two first editions were mainly focused on NIKA2

although opened to the entire scientific community.

Then, the series evolved, and the name has been changed,

in order to include

all observations of the Universe at mm wavelength,

at all scales from stellar to cosmological one

and also multi-wavelength studies.

# Grenoble 2019

**mm Universe @ NIKA2**  
Observing the millimeter Universe with the NIKA2 camera

2019 June 3-7  
LPSC  
Grenoble  
FRANCE

This conference is dedicated to the scientific exploitation of the **NIKA2 camera** installed at the **IRAM 30-m telescope**

**LOCAL ORGANIZING COMMITTEE**  
Johana Paquien  
Andrea Catalano  
Florian Kéruzoré  
Juan Francisco Macías Pérez  
Frédéric Mayet  
Laurence Perotto

**INTERNATIONAL SCIENTIFIC COMMITTEE**  
Caitlin Casey, Univ. of Texas  
Marco De Petris, Univ. Sapienza Rome  
Josep Miquel Girart, IEEC  
Guillaume Lagache, LAM Marseille  
Anaïlle Maury, CEA Saclay  
Frédéric Mayet, LPSC Grenoble - chair  
Alessandro Monfardini, I. Neel Grenoble  
Nicolas Routhieu, IPAG Grenoble  
Rashid Sunyaev, Max Planck Garching

**MAIN TOPICS**  
Cosmology with galaxy clusters  
Galaxy cluster science  
Galaxy formation in the early Universe  
Nearby galaxies  
Galactic star formation  
From dust to planets  
Instrumentation



# Rome 2021

**Observing the millimeter Universe with the NIKA2 camera**  
Sapienza University, Department of Physics - Rome  
28 June - 2 July 2021

The "mm Universe @NIKA2" Conference is organised by the Department of Physics at Sapienza University in Rome and held online via Zoom due to the current situation. We hope that the virtual format will allow all the interested participants to be able to take part! "mm Universe @NIKA2" is the second edition in a series of workshops dedicated to the scientific exploitation of the NIKA2 camera installed at the IRAM 30-m telescope (Pico Veleta, Spain) and opened to the scientific community to report about related targets, such as:

- Cosmology with clusters
- Galaxy cluster science (SZ, X, visible)
- Galaxy formation in the early Universe
- Nearby galaxies
- Galactic star formation
- From dust to planets
- Instrumentation, other mm-instruments.

Registration will open on 1st March 2021 until 16th May 2021. The mm Universe 2021 conference is funded by Sapienza University.  
<https://agenda.infn.it/event/25056/>

**International Scientific Committee**  
M. De Petris (Univ. Sapienza Rome) - co-chair  
J. M. Girart (IEEC Barcelona)  
G. Lagache (LAM Marseille)  
J. F. Lestrade (LERMA Paris)  
F. Mayet (LPSC Grenoble) - chair  
A. Monfardini (I. Neel Grenoble)  
N. Routhieu (IPAG Grenoble)  
R. Sunyaev (MPIA Garching)  
G. Yepes (UAM Madrid)

**Local Organizing Committee**  
M. De Petris - chair  
V. Capalbo  
F. De Luca  
A. Ferragamo - co-chair  
G. Giardinia  
A. Pallwal

# Grenoble 2023

**mm Universe 2023**  
3rd edition - 26-30 June 2023  
LPSC Grenoble - France

An international conference devoted to the Universe at millimetre wavelengths. Instrumental, observational and theoretical topics, from stellar to cosmological scales.

**Topics**

- mm Cosmology (CMB & clusters)
- Thermal & kinetic SZ
- Galaxy cluster physics
- Galaxy formation in the early Universe
- Nearby galaxies
- Galactic star formation
- From dust to planets
- mm instruments
- Simulations

**International Scientific Committee**

L. Bielewicz (Argonne Nat. Lab.)  
J. Chluba (Univ. Manchester)  
M. De Petris (Univ. Sapienza Rome)  
J. M. Girart (CSIC Barcelona)  
J. F. Lestrade (LERMA Paris)  
F. Mayet (LPSC Grenoble) - chair  
M. McDonald (MIT)  
A. Monfardini (I. Neel Grenoble)  
T. Mroczkowski (ESO)  
D. Nagai (Yale)  
L. Perotto (LPSC Grenoble)  
N. Ponthieu (IPAG Grenoble)  
F. Ruppin (IP2I Lyon)  
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J. Paquien  
L. Perotto  
S. Savorgnano  
C. Vannier

Logos for CITPS, Institut national de physique nucléaire et de physique des particules, LPSC, UGA Université Grenoble Alpes, FOCUS, and Observatoire de Grenoble.

# mm Universe 2025

Call for volunteers to  
host the next edition in June 2025.

If you are interested, contact me.

This will then be discussed  
within the International Scientific Committee



# International Scientific Committee

- L. Bleem (Argonne Nat. Lab.)
- J. Chluba (U. Manchester)
- M. De Petris (Univ. Sapienza Rome)
- J. M. Girart (CSIC Barcelona)
- J. F. Lestrade (LERMA Paris)
- F. Mayet (LPSC Grenoble) - chair
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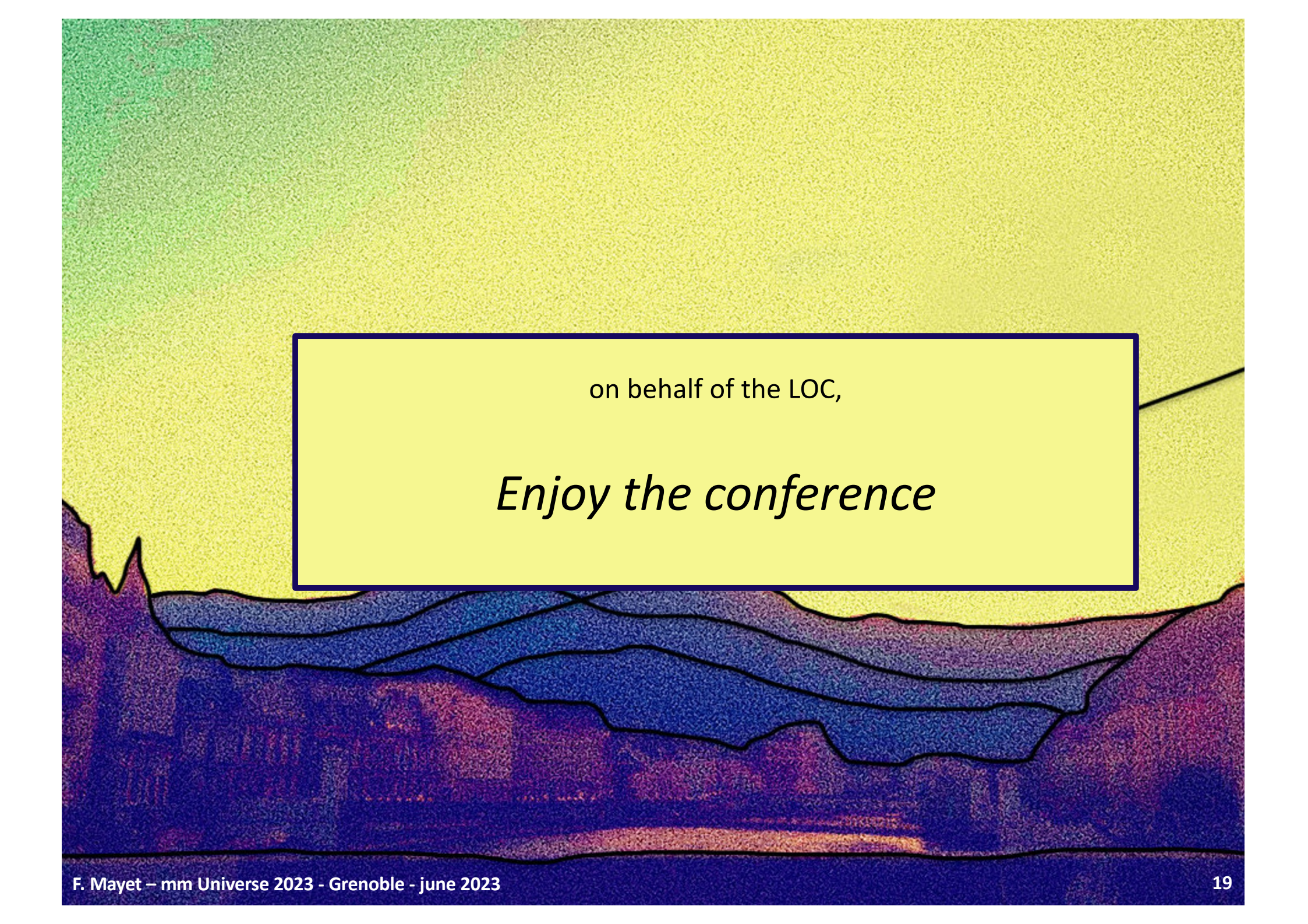
# Fundings

mm Universe conference acknowledges financial support from



Institut national de  
physique nucléaire et de  
physique des particules





on behalf of the LOC,

*Enjoy the conference*