# **Enigmass Plenary Meeting** Introduction

Fabienne Ledroit and Frédérique Marion Annecy October 28, 2021



#### Welcome

- First Enigmass2 plenary meeting last year had to be a remote meeting
- We are very happy that this meeting can take place in person, thank you for coming!
  - > And thanks to our coordinators who helped organize the meeting
- Special greetings and thanks to our:
  - > Steering board members
  - International scientific council members

### **Formal and Financial Matters**

- □ Budget path: ANR ⊃ UGA (Idex) ⊃ CNRS
  - > Enigmass2: 5 x 558.416 = 2.792.080 €
- 2020 amendment to UGA-CNRS formal agreement
  - > 2020 funding instalment in May 2020
- New amendment to UGA-CNRS agreement required for 2021-2014
  - > Pre-requisite: Idex confirmation, delayed by pandemic
  - > DR11 decided to lend 2 M€ provision in December 2020
- Idex confirmed in July 2021
  - Labex management transferred from ANR to Idex
  - > UGA-CNRS amendment still pending
- □ Labex scheduled to end on 31/12/2024
  - Budget must be spent by that date
  - Exception: PhDs can extend to 2025

# Calls for projects: PhD & postdocs

- Target: 14 2-year junior postdocs + 4 PhDs to support physics projects within WPs
  - > 3 calls: 2020, 2021, 2022
  - > 2020: 5 postdocs + 1 PhD
    - ATLAS (LAPP), Auger (LPSC, PhD), H.E.S.S. (LAPP), LSST (LPSC), NIKA2 (LPSC), theory (LAPTh)
  - 2021: 4 postdocs + 1 PhD
    - DUNE (LAPP), LHCb (LAPP), ATLAS (LPSC), theory (LPSC), ALICE (LPSC, PhD)
    - Welcome to our new Enigmass2 fellows: Carolina Arata, Fernando Arias-Aragón, Oliver Lantwin, Davide Miceli (2020 – delayed), Ana Peixoto + Irene Bachiller (delayed)
  - > 2022 : 5 postdocs + 2 PhDs
- Timeline for 2022 call: launch 08/10/21, deadline 09/11/21, selection 08/12/21
- Projects assessed by external experts, selection done by management board
  - Scientific quality, strategic position, impact, feasibility & timing
- Teams are expected to follow instructions for hiring process!

# Calls for Projects: R&D

- R&D for future detectors
  - > Overall budget 340 k€
- 2022 call
  - > 2 major projects, ≤ 140 k€ over 2022-2023, identified priorities: GW and CMB
  - > 2-3 R&D booster projects, 10-15 k€ over 2022
- 4 proposals received and funded
  - > Projects assessed by external experts, selection done by management board
  - Major projects
    - Building an in-vacuum seismically isolated optical bench at LAPP for R&D towards future gravitational wave detectors (WP2, L. Rolland): 140 k€
    - New generation lenses for next decade millimeter cosmology experiments (WP3, A. Catalano): 121 k€
  - R&D booster projects
    - ALICE FOCAL (WP1, R. Guernane): 15 k€
    - Evolution du banc de caractérisation de l'évaporation du CO2 dans des micro-canaux pour le refroidissement de la prochaine génération de détecteurs silicium du FCC : MC2O2 (WP1, R. Kossakowski): 15 k€
- □ 2023 call
  - > Only R&D booster projects, 50 k€ overall

### **Status of expenses**

□ Fraction of Enigmass2 budget committed so far: ~50%

With approved R&D projects and 2022 PhDs and postdocs: ~90%

Schools

- > ESIPAP & GRASPA, ~30 k€/year
- Master internships
  - > 2021-2024: funding 12 4-month internships/year
- Visiting scientists
  - > None in 2020 and 2021, due to late budget & pandemic
  - ≻ Remaining funds ~37 k€

Outreach

- > 2021: video + mallette Cosmix
- ≻ Remaining funds: ~30 k€

## **ISC recommendations**

Enigmass2 ISC formed one year ago

- Wolfgang Adam, Nabila Aghanim, Michael Krämer (chair), Martin Kunz, Teresa Montaruli, Federica Petricca
- First meeting held in January 2021

#### Written report, with recommendations

- Consider measures to further increase the synergies and to foster the collaboration between laboratories
- Establish more concrete criteria for measuring success and, in particular, the added value of the network
- Continue to foster the career of young scientists
- Think about activities to further increase the visibility of the network and the participating institutions
- Continue to work on the sustainability of the network in order to secure the outstanding scientific activities in the long term

#### Joint seminars

- Shared invitations to join some LPSC and LAPP seminars on Zoom
  - > Thanks to Marie-Laure, Iro and David
  - May 27: COMET experiment, Cristina Carloganu (LPC Clermont)
  - June 24: The first result from the Muon g-2 experiment at Fermilab, On Kim (IBS/CAPP South Korea) + A custodial symmetry for g-2, Cédric Delaunay (LAPTh),
  - June 25: Test of Lepton Flavour universality : status, challenges and prospects, Renato Quagliani (EPFL)

#### International workshop opportunity

- On topics within Enigmass science program
- □ Held at one of the Enigmass sites, in 2023
- □ Enigmass funding could be ~10 k€
- Please think about it, we will collect proposals in the first half of 2022

#### Post-2024 future?

First discussions within PAGE about possible research project within confirmed Idex
But Idex guidance indicates UGA-only scope



### **Enjoy the meeting!**