Enigmass(+) Plenary Meeting Introduction

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Welcome

- Welcome to the 4th Enigmass2 plenary meeting... which is also the 1st plenary meeting of the Enigmass+ research federation
 Thanks to our coordinators who helped organize the meeting
- Thanks to Dominique, Véronique and Virginie (LAPTh) who helped with practical organization

Admin matters

- □ Budget path: ANR UGA (Idex) ⊃ CNRS
 - > Enigmass2: 5 x 558.416 = 2.792.080 €

□ (This phase of the) Labex scheduled to end on 31/12/2024

- > 99.5% of budget committed so far
- > Budget must be spent (not just committed) by that date
 - Exception: PhDs and postdocs can extend to 2025
- If you are not going to spend all of the funds allocated to your project, or if there are delays, we need to know ASAP
- > Leftovers will be recovered early 2024, so that they can be reallocated

Report on Enigmass2 calls for projects

- PhD & postdocs: 3 calls
 - > 2020: 4 postdocs + 1 PhD
 - > 2021: 4 postdocs + 1 PhD
 - > 2022 : 6 postdocs + 2 PhDs
 - Welcome to our most recent Enigmass2 fellows
 - Rance Solomon, Sihem Sayah and Mateo Fernández-Torreiro
- □ R&D: 2 calls
 - > 2021: 2 major projects + 2 R&D boosters
 - > 2022: 6 R&D boosters

Summary of postdoc/PhD/R&D allocations

WP1

- > Effective Field Theories (N. Berger) postdoc 2020
- > Quark-Gluon Plasma with ALICE (G. Conesa Balbastre) PhD 2021
- > Large-scale Liquid Argon detector prototype for DUNE (D. Duchesneau) postdoc 2021
- > Detector operation and data analysis for LHCb (JF Marchand) postdoc 2021
- > Dark QCD with ATLAS (MH Genest) postdoc 2021
- > DUNE vertical drift TPC module 0 (J. Collot) PhD 2022
- > New phenomena in the dilepton final state at the LHC (T. Berger-Hryn'Ova) postdoc 2022
- > Light new physics at the atomic frontier (C. Delaunay) postdoc 2022

WP2

- > Photons in Auger (C. Bérat) PhD 2020
- > Lorentz Invariance with CTA (S. Caroff) PhD 2022
- > Cosmic-ray and new physics signatures in the very high-energy sky (F. Calore) postdoc 2022
- > Extraction of error signals for gravitational wave detector control (L. Rolland) postdoc 2022

□ WP3

- > Etude des amas de galaxies avec LSST (C. Combet) postdoc 2020
- > Cluster cosmology with the NIKA2 camera (F. Mayet) postdoc 2020
- > Gravitational probes of dark matter (P. Serpico) postdoc 2020
- > Axions at the crossroads (C. Smith) postdoc 2021
- > Cosmological constraints from galaxy clusters with Rubin (T. Guillemin) postdoc 2022
- > Towards high resolution cosmology: the CMB-HRO project (J. Macías Pérez) postdoc 2022

□ WP1

- ALICE FOCAL (R. Guernane)
- MC2O2² (R. Kossakowski)
- Excellency at High Frequency (G. Pignol & O. Bourrion)

□ WP2

- Building an in-vacuum seismically isolated optical bench at LAPP for R&D towards future gravitational wave detectors (L. Rolland)
- > Boosting Astro/Cosmo with GPUs (Y. Genolini)
- R&D for the photodiode readout system of GW detectors (M. Was)

□ WP3

- New generation lenses for next decade millimeter cosmology experiments (A. Catalano)
- Gas circulation and purification system for rare events alpha detector (A. Dastgheibi-Fard)
- Directional Dark Photon Dark Matter Exploration at 1 meV (C. Beaufort & D. Santos)

Training: winter/summer schools & master internships

ESIPAP 2023 – 10th edition

- > 14 participants to course 1
- > 8 participants to course 2
- □ GraSPA 2023 10th edition
 - > 30 students
- Les Houches 2023
 - > Supported with 7 k€
- **Cole de Gif 2023**
 - > Supported with 2 k€
- Master internships
 - > 16 4-month internships in 2023





ENIGMASS NOW HAS A FUTURE...

Fédération de recherche Enigmass+

- □ The federation is now a reality!
- □ Associates LAPP, LAPTh, LPSC and IPAG
 - > UGA, USMB, IN2P3, INP, INSU
- Many expected benefits
 - Stabilise our scientific collaboration
 - Enable the possibility of long-term forward planning
 - > Reinforce the regional visibility of our field
 - > Provide a co-funding framework for the 2025+ Labex project
- □ Founding confirmed by all parties
 - > CNRS (01/01/23), USMB (24/01/23) and UGA (16/06/23)
 - Federation hosted at LPSC for administrative purposes
 - > Coming next: formal agreement for co-funding to start in 2025
- □ First 2-year postdoc fellowship already allocated by IN2P3 in 2023
 - RICOCHET (WP1, J. Lamblin, LPSC)
 - > Welcome to our first Enigmass+ fellow, Stefan Zatschler

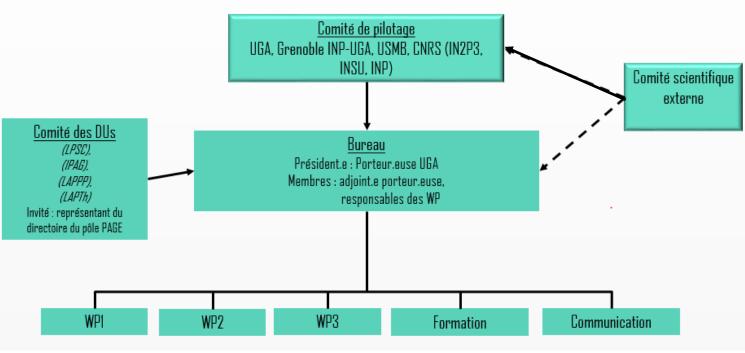
Future Enigmass+ Labex will be funded

□ Fall 2022

- > UGA declared the possibility for some Labex to continue
 - 8-year projects starting January 2025
- Public audition of Labex candidates
- Enigmass included in call for proposals
- Proposal submitted in February 2023
- □ Referee reports received in April 2023
- □ Response to referees submitted in May 2023
- Decision to fund Enigmass+ notified in July 2023
- □ Still waiting for budget to be announced (Fall 2023)
 - > UGA should commit ≥ 239 k€ / year
 - > 320 k€ / year requested to match CNRS + USMB contributions

Enigmass+ governance

- Federation and Labex will have perfectly overlapping governance structures
 - Structure imposed by UGA



- □ We are preparing to hand over the reins
 - > Grenoble: new coordinator to be announced soon
 - > Annecy: Thibault Guillemin will take over as deputy coordinator



Enjoy the meeting!