

# GDR-InF AGENDA 2020

- [Axions++ : Axions And Other Light Particles](#) , LPSC Grenoble , 5th-7th May, 2020 (Diego)
- Baryonic asymmetry of the universe, Grenoble (Guillaume/Stephanie)
- Baryons workshop, 14/15 May 2020 in Orsay (Yasmine)
- Polarization: from ee to PbPb collisions (Winn/Kou)
- g-2 workshop? History, experiments and theory at a large (?)
- Lectures on detector techniques (Exp)
- Lectures on "Group theory for flavour model-builders" (Diego) or Lattice QCD (Jérôme)? (Th)
- Lectures: EFT I/SCET II (Joint Exp-Th)
- Top LHC? Exchange speakers with other groups?
- Annual workshop (all)

# AXIONS++

Full description here:

<https://indico.cern.ch/event/804538/overview>

Support from the ERC nEDM, from the **CPTGA** and from the IDEX Université Grenoble Alpes "Initiatives de recherche stratégiques" pragma-Higgs.

3000 euros requested to GDR

# BARYONIC ASYMMETRY OF THE UNIVERSE

Content:

- theory of the baryogenesis (there are two groups at least in France)
- direct measurement of anti-matter in the universe (new results from AMS)
- measurement of the baryonic asymmetry itself (PLANK)
- CP violation with LHCb
- neutron EDM

# BARYONS

14/15 May 2020 in Orsay

- Some funding from P2IO (1000)? Request to GDR?

Organising committee:: Danny van Dyk, Sébastien Descotes Genon, Carla Marin Benito, Yasmine Amhis

Wanted to advertise it in December. Done?

QED effects in LU tests + Predictions.

Lattice Lambda(1520) Stephan Meinel.

LCSR FF Lambda(1520) Danny + Sebastien.

3/2, 1/2 separation in angular analyses.

Lambda decay asymmetry BES III.

Radiative Marzia NLO computation of photon polarisation.

What about  $L_b \rightarrow p \pi \mu \mu$ .

Radiative  $L_b \rightarrow p \pi \gamma$ .

Other b-baryon states.

Pentaquarks and Exotics contributions.

Production fraction, for absolute branching fraction.

What about the lifetimes ? is this a closed topic?

Estimation of charm-loop contributions

Prospects for the various modes at LHCb

Lepton flavour universality violation

# **POLARIZATION: from ee to PbPb collisions**

5000k requested

# ANNUAL WORKSHOP

- Anticipate? (JUNE/JULY)?
- Suggest to invite IN2P3/INP representatives
- Should we discuss projects? (ANR/ERC/.....)

# Feedback from Conseil de Groupement

Fix the annual meeting date earlier (Diego: early September?/OL: many events in Sept/Oct/Nov). Maybe we should pay for the train

Need to develop the more exotic physics (e.g. axions/light BSM) part of GDR

Suggestions from Marie-Helene: 1) Link between Babar analyses/ISR and  $g-2$ , talk about possible measurements and theory 2) Calorimeters, are they necessary beyond differentiating  $e$  and  $\mu$ ?

Need to find a way to bring the GDR-InF theorists together in France (Nazila)