

INTENSITY

frontier

GDR-InF

WORKING GROUPS CONVENERS MEETING

21 Janvier 2019

BONNE
année

<http://gdrintensityfrontier.in2p3.fr/>

New working groups and conveners



After the discussions at Arles and at the last conveners' meeting, we have contacted Carla, Giulio, Michael, Peter, who accepted to join the team.

THANKS and WELCOME.

Mat Charles is stepping down officially, due to his physics coordination role in LHCb: thanks Mat!

Here is the new organization (to be advertised by email and put on the website):

WG1: CP violation in fermionic processes, CKM triangle including semi-leptonic decays

Christopher Smith, Jean-Francois Marchand, Stephanie Rocca

WG2: Searches for new physics via neutral FCNC processes

Diego Guadagnoli, Carla Marin-Benito, Justine Serrano

WG3: Heavy flavour production and spectroscopy (including heavy ion community)

Emi Kou, Michel Winn

WG4: Interplay of quark and lepton flavour (including all R ratios)

Ana Teixeira, Yasmine, Peter

WG5: Future experiments

Mark Goodsell, Stephane Monteil, Giulio

Mandate until December 2021

Why we asked for a GDR?



Theory and experiment need to come together in order to interpret results, combine bounds from different searches

The idea of establishing a GDR-InF emerged in few CNRS PEPS-PTI projects (Flagship measurements at LHCb, NouvPhysLHCb, Phenobas), followed by:

- April 2016: Brainstorming meeting
- August 2016: proposal submitted to IN2P3 and INP

Goals

- Reinforce relations between **theory and experiment**
- Facilitate **collaborations between labs**
- Favour the emergence of **common projects**
- Provide **visibility** for the French intensity frontier community
- Promote the **young generation** of physicists working in the field
- Discuss the **future experiments probing the intensity frontier**

Conseil de groupement

The “conseil du groupement” plays an *advisory role* in both the *planning of the scientific programme* and the *general running of the GDR*.

It also *acts as a liaison between the GDR and the individual labs*.

- [Stephanie Roccia \(CSNSM\)](#)
- [Olivier Leroy \(CPPM\)](#)
- [Olivier Deschamps \(LPC\)](#)
- [Nazila Mahmoudi \(IPNL\)](#)
- [Stephane Lavignac \(IPhT, CEA\)](#)
- [Isabelle Ripp-Baudot \(IPHC\)](#)
- [Stephane T’Jampens \(LAPP\)](#)
- [Diego Guadagnoli \(LAPTh\)](#)
- [Marie-Helene Schune \(LAL\)](#)
- [Christopher Smith \(LPSC\)](#)
- [Sebastien Descotes-Genon \(LPT\)](#)
- [Mark Goodsell \(LPTHE\)](#)
- [Jérôme Charles \(CPT\)](#)



We should add LPC Caen!
Are you willing to be reconfirmed? If not, please find a person to replace you.

Some tools

GDR-InF

- **Logo: INTENSITY**

frontier

GDR-InF

Decided after a nice contest.

*Please, **put the logo on the websites/indico pages** of events supported/organised by the GDR-InF.*

- **Mailing list: GDR-INTENSITYFRONTIER-L@IN2P3.FR**

At the moment still used in a limited way. Do not hesitate to use it to announce:

- *events of interest for the community*
- *jobs*
- *any other interesting topic for the GDR-InF community*

Please invite your (new) students/postdocs/group members to sign up!

- **Website: <http://gdrintensityfrontier.in2p3.fr/>**

Constantly updated, with latest news and links to previous and past events.

- **Dedicated indico area: <https://indico.in2p3.fr/category/731/>**

What are we doing?

Trying to establish few formats:

- dedicated to our aim to bind the community
- complementary to traditional workshops/conferences

1) Intensity lectures.

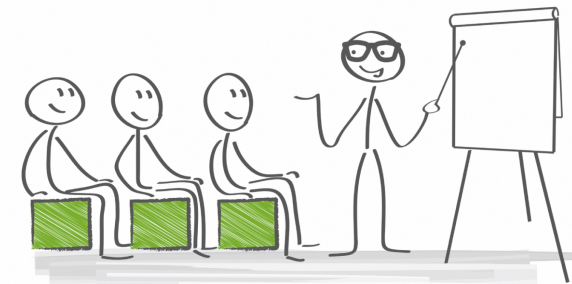
Lectures on a blackboard, theory and experiment alternated, recorded, possibly published

2) Intensity brainstorming

Following the model: white cards + roundtable

3) Topic workshops

To sit down and work on a specific subject



4) Supported workshops

Not directly organized by GDR-InF, but of interest for our community

5) The general GDR meeting

To report on the activities, present the ongoing work in our community, hear from external speakers on topics/experiments on which we are not directly implied

Still keeping all doors open to any other needed format!

A 2018 full of events organised by the GDR-InF!



Participants

GDR-InF workshop: The future of the intensity frontier?

Geneve, CERN, February 1-2

40

GDR-Intensity lectures: "LF(U)V in B decays II"

Paris, IHP, 13th-14th February

18

The strong CP puzzle and axions (+lectures)

Grenoble, LPSC, 14th-16th May

45

Workshop on multibody charmless B-hadron decays

Paris, LPNHE, 6th-7th June

20

Workshop on singly and doubly charmed baryons

• *Paris, LPNHE, 26th-27th June*

?

GDR-Intensity Lectures: « Vcb »

Paris, IHP, 2nd-3rd July

12

GDR-InF annual workshop

Arles, 5th-7th November

40

and The European Strategy For Particle Physics

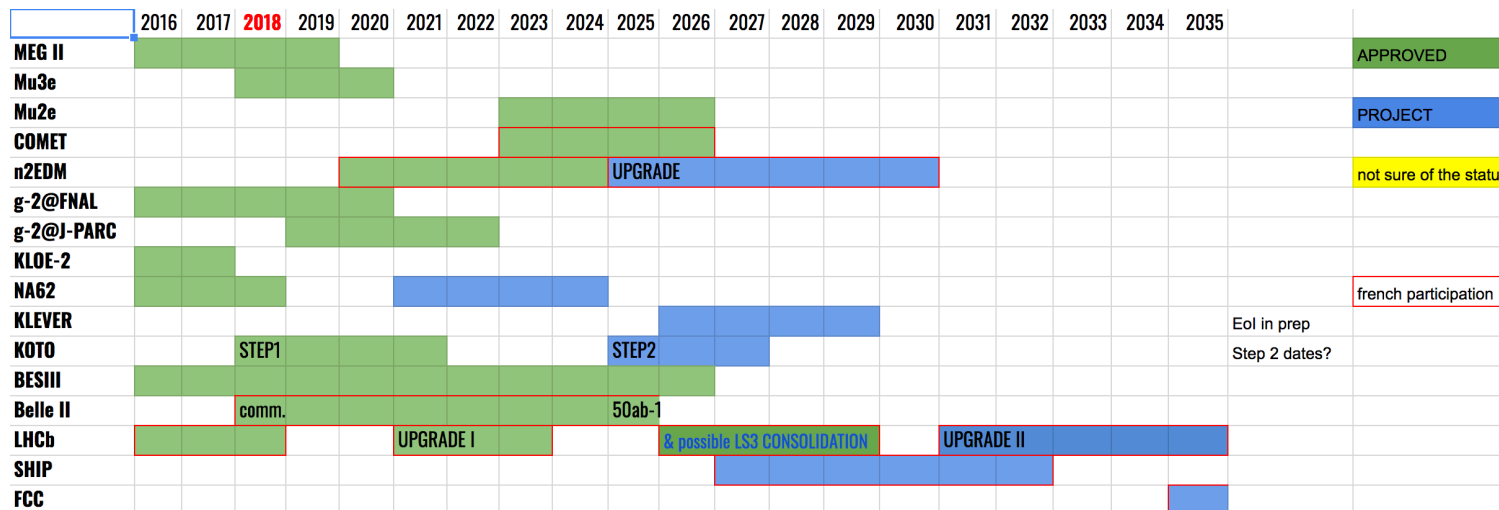
(document submitted end of August after 2 vidyo meetings and lots of email interactions)

Note: students can acquire credit for their ED when attending lectures!

GDR-InF production



- [Minutes of Cern meeting on future experiments](#)
(It would have been ideal to have minutes for all the workshops)
- [Future experiments timeline.](#)
- Lectures videos.
- Publication of the lectures in paper/book: ongoing...
- [ESPP document](#)



Role of conveners



Be aware of the activities within the perimeter of the working group in France and outside.

Discuss regularly with your co-conveners.

Propose activities for the working group and help organizing them, find collaborators, speakers, etc...

Attend, whenever possible, events organized within your working group. Take note of the highlights (minutes would be great), circulate them if you consider it appropriate.

Attends the conveners meetings to regularly discuss together. Give suggestions and opinions also on the events of the other working groups.

Promote the participation among the people in your community.

Keep alive the mailing list and website.

Help in the organization of the annual general meeting, where also a report on your activities could be required.

DO NOT HESITATE TO CONTACT ME AND AOIFE FOR ANY QUESTION AND NEED!

23000 for 2019!

Good news.

Seems a lot, but it goes away quickly...

Always consider the option of asking for additional budget to your labs, labex, university, etc....for funding your events.

Agenda 2019



Lectures: (6000 €)

Price of lecture is 3000 € per event. We can probably have two events. We need to verify interest before the event itself being organized. Should we doodle the topics?

Proposed topics:

- **QED corrections**
- **Vub**
- **Dalitz plots and 3-body decays (measurements of gamma)**

Noted: Ecole EDM 2021 les houches (context workshop general EDM 3 ans)

We should pick up two

Agenda 2019



When and where? Status? Choices?

Workshops:

- **QED corrections to B decays:** Introductory talks and in depth technical discussion
- **Workshop with neutrino GDR: Interface between lepton flavour and quark flavour** (AT: structure of neutrino GDR is changing, therefore need to make contact with new person responsible.)
- **Workshop with Terascale IRN (top/Higgs): Connection between Indirect measurements at ATLAS/CMS and LHCb/Belle II/low energy experiments**
- **Workshop 5eme force Annecy**
- **D spectroscopy-Vcb-R(D(*))**
- **Annual General Meeting (6500 €)** (Feedback on this year general meeting was positive, suggestions to make discussions parallel in small groups. Need preparation in advance)
- **Future experiments** (Stéphane and Mark)

Supported events:

- **b to sll workshop in Lyon** (2000 €) (4-6 October)
- (AT: International workshop on charged lepton violation, every three years, supposed to be in Japan in 2019 but maybe this will have to change, in which case it might be here.)

Noted: Asymmetrie baryonique (cosmo et particules). Proposition a la SFP (2019), sinon₁
GDR (2020)

Agenda 2019



Photo exposition, maybe associated with the CNRS 80 years.

*Titre du projet : La frontière de l'intensité : sonder l'inconnu.

* May-December

* Ville(s) où le projet est organisé : Arles, Clermont-Ferrand, Grenoble, Lyon, Marseille, Paris

- Lieu(x) des opérations envisagé(s) : accessibles au grand public, de préférence gratuits.
Nous sommes actuellement en train de contacter différents lieux, comme les collectivités territoriales, les espaces d'expositions proposées par des médiathèques municipales et universitaires.

* Expos photos, debat grand publique-physiciens, peut etre performances artistique, contest Instagram.

Workshop 5eme force Annecy
D spectroscopy-Vcb-R(D(*))

Agenda 2019



Annual General Meeting (6500 €) (Feedback on this year general meeting was positive, suggestions to make discussions parallel in small groups. Need preparation in advance)

Asymmetrie baryonique (cosmo et particules). Proposition a la SFP (2019), sinon GDR (2020)

Brainstorming:

Future experiments (Stéphane)

Supported events: (2000 €)

b to sll workshop Lyon (Nazila, 2000 €) (should happen in september/october)

(AT: International workshop on charged lepton violation, every three years, supposed to be in Japan in 2019 but maybe this will have to change, in which case it might be here.)

CNRS 80 years events?

Idea to submit a proposal for one (more?) grand publique event, with a performance, photo contest and round table around “intensity” in the story of CNRS.

Funding possible but not for granted

Idea to make a photo exhibition on the intensity frontier, to be shown in cities where there is a GDR presence/motivation