## CONSEIL DE GROUPEMENT

10-12-2017



Aoife Bharucha - Francesco Polci

## The GDR-InF Community

- GDR-InF created on January 2017
- (61) senior physicists
- 14 laboratories of IN2P3, INP, CEA
- Many students and postdocs
- New members welcome!

<sup>14</sup>Laboratoire de Physique Théorique (LPT), Orsay

Asmaa Abada<sup>14</sup>, Ziad Ajaltouni<sup>11</sup>, Yasmine Amhis<sup>10</sup>, Sergey Barsuk<sup>10</sup>, Nicole Bastid<sup>11</sup>, Jerome Baudot<sup>7</sup>, Damir Becirevic<sup>14</sup>, Karim Benakli<sup>15</sup>, Eli Ben-Haim<sup>12</sup>, Véronique Bernard<sup>4</sup>, Aoife Bharucha<sup>2</sup>, Benoit Blossier<sup>14</sup>, Philippe Boucaud<sup>14</sup>, Jerome Charles<sup>2</sup>, Matthew John Charles<sup>12</sup>, Jacques Chauveau<sup>12</sup>, Max Chefdeville<sup>8</sup>, Julien Cogan<sup>1</sup>, Eric Cogneras<sup>11</sup>, Philippe Crochet<sup>11</sup>, Wilfrid Da Silva<sup>12</sup>, Sascha Davidson<sup>5</sup>, Cedric Delaunay<sup>9</sup>, Luigi Del Buono<sup>12</sup>, Olivier Deschamps<sup>11</sup>, Sebastien Descotes-Genon<sup>14</sup>, Benjamin Fuks<sup>15</sup>, Vladimir Gligorov<sup>12</sup>, Mark Goodsell<sup>15</sup>, Diego Guadagnoli<sup>9</sup>, Frederic Kapusta<sup>12</sup>, Marc Knecht<sup>2</sup>, Emi Kou<sup>10</sup>, Witek Krasny<sup>12</sup>, Stephane Lavignac<sup>6</sup>, Francois Le Diberder<sup>10</sup>, Régis Lefèvre<sup>11</sup>, Renaud Le Gac<sup>1</sup>, Laurent Lellouch<sup>2</sup>, Olivier Leroy<sup>1</sup>, Frederic Machefert<sup>10</sup>, Giampiero Mancinelli<sup>1</sup>, Mariane Mangine Brinet<sup>13</sup>, Nazila Farvah Mahmoudi<sup>3</sup>, Jean Francois Marchand<sup>8</sup>, Stephane Monteil<sup>11</sup>, Vincent Morenas<sup>11</sup>, Jean Orloff<sup>11</sup>, Pascal Perret<sup>11</sup>, Francesco Polci<sup>12</sup>, Sarah Porteboeuf<sup>11</sup>, Isabelle Ripp-Baudot<sup>7</sup>, Patrick Robbe<sup>10</sup>, Marie-Hélène Schune<sup>10</sup>, Justine Serrano<sup>1</sup>, Christopher Smith<sup>13</sup>, Ana Teixeira<sup>11</sup>, Vincent Tisserand<sup>8</sup>, Stephane T'Jampens<sup>8</sup>, Edwige Tournefier<sup>8</sup>, Guy Wormser<sup>10</sup>

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<sup>2</sup>Centre de Physique Théorique (CPT), Marseille;

<sup>3</sup>Centre de Recherche Astrophysique de Lyon (CRAL), Lyon

<sup>4</sup>Institut de Physique Nucléaire (IPN), Orsay

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<sup>6</sup>Institut de Physique Théorique (IPhT), CEA Saclay

<sup>7</sup>Institut Pluridisciplinaire Hubert Curien (IPHC), Strasbourg

<sup>8</sup>Laboratoire d'Annecy-Le-Vieux de Physique de Particules (LAPP), Annecy-Le-Vieux

<sup>9</sup>Laboratoire de l'Accélérateur Lineaire (LAL), Orsay

<sup>10</sup>Laboratoire de Physique Corpuscolaire (LPC), Clermont-Ferrand

<sup>12</sup>Laboratoire de Physique Nucléaires et des Hautes Energies (LPNHE), Paris;

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<sup>15</sup>Laboratoire de Physique Théorique et Hautes Energies (LPTHE), Paris

LISTSERV.IN2P3.FR (1 List)

List Names 
Subscribers

GDR-INTENSITYFRONTIER-L
[Configure]

Allocated budget:

15000 euros per vear

## The scope of the GDR-InF

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

#### 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

The GDR-InF has been presented few times this year:

- Kick-off meeting
- Belle 2 workshop at LAL
- GDR Terascale (mentioned)
- SHIP workshop
- CDU IN2P3 next Dec 14th

## Conseil de groupement

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



1 meeting per year at least, during the general GDR-InF meeting (exception this year). Should we have more frequent meetings?

## Working Groups and Convenors

In role for 2,5 years

#### **CP** violation

Christopher Smith, Jean-Francois Marchand, Stephanie Roccia

Rare, radiative and semi-leptonic B decays, Charm and Kaon Physics Yasmine Amhis, Diego Guadagnoli (two WGs of the original proposal joined)

Heavy flavour production and spectroscopy Matthew Charles, Emi Kou

Interplay of quark and lepton flavour Ana Teixeira, Justine Serrano

## Future experiments Mark Goodsell, Stephane Monteil

- This year, 3 meetings with the conveners (and many interactions via emails)
- Minutes are available

### Some tools

• 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:

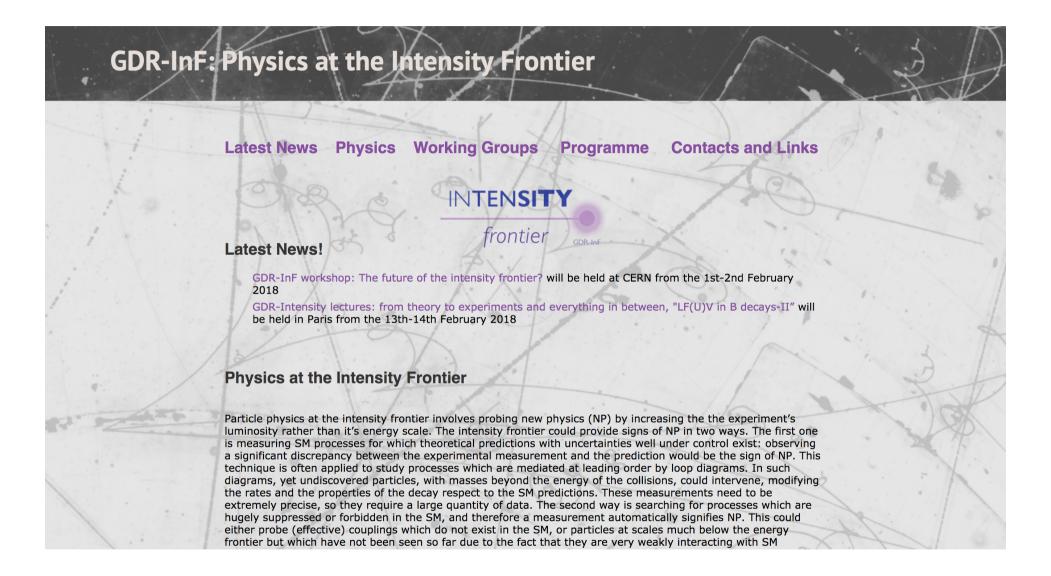
- events of interest for the community
- jobs
- any other interesting topic for the GDR-InF community

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

Website: <a href="http://gdrintensityfrontier.in2p3.fr/">http://gdrintensityfrontier.in2p3.fr/</a>
 Constantly updated, with latest news and links to previous and past events.

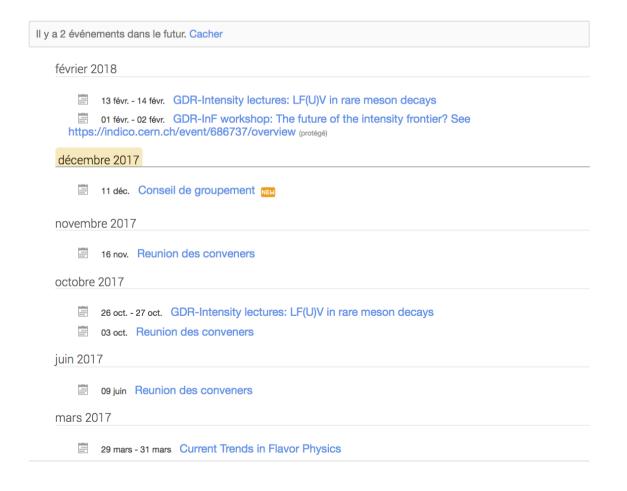
Dedicated indico area: <a href="https://indico.in2p3.fr/category/731/">https://indico.in2p3.fr/category/731/</a>

## The website: how it looks like



## The GDR-InF indico area





## Meeting formats

It could be nice to establish recurrent formats:

- Dedicated to our need of bounding the community
- Easy to repeat as we acquire experience
- Complementary to traditional workshops/conferences



#### 1) Intensity lectures.

#### 2) Intensity brainstorming (?)

Following the model of the workshop on future experiment (white cards + roundtable)?

#### 3) Topic workshops

Dedicated to effectively work on a specific subject/area (don't need to be large events)

#### 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

#### 6) Others?

## Summary of activities in 2017

#### **Events organized by the GDR-InF:**

- GDR-InF Kickoff meeting, Institut Henri Poincaré (Paris), March 29-31
- GDR-Intensity lectures: from theory to experiments and everything in between, "LF(U)V in B decays"

Institut Henri Poincaré (Paris), October 26-27

#### Events supported by the GDR-InF:

- The 2nd LHCb open semitauonic workshop LAL (Orsay), November 13-14
- Journée SHiP/Physique du secteur caché LPNHE(Paris), October 11

#### Remarks.

- In supported events we give a contribution to invite speakers.
   The purpose is to profit of already existing/planned events, avoiding to create duplicates
- This was our first year, we had to setup things.
  - We need to make sure that all of us keep in mind that the GDR-InF exists and can provide support
  - We discovered that very concrete plans need to be established well in advance (lots of events in HEP, better use of budget, increase of attendance,...)

## Intensity lectures: feedback

THEORISTS: 30% EXPERIMENTALISTS: 70%

QUESTION	% YES (among theorists)
Was the duration appropriate?	<b>65</b> (67)
Was the level of theory part appropriate?	<b>55</b> (100)
Was the level of experimental part appropriate?	<b>80</b> (33)
Is there any topic you would have liked to discuss and was not?	<b>44</b> (20)
Were the place and room adapted?	100
Do you think that recording the lectures is a good idea?	100
Would you suggest a collegue to watch the videos of the lectures when available?	100
How would you globally rate the lectures?	<b>4</b> (3.5)
Are you willing to follow other lectures in the future?	100
Would you suggest to your colleagues to follow next lectures?	yes: <b>68</b> (66); maybe <b>32</b> (34)
Which subject would you suggest for the next edition?	

#### Globally, very positive feedback! (all grades >3/5, average grade 4/5)

**Main comments:** a bit too short; provide lectures notes; general introduction on the basics; provide the outline of the lectures

**Suggestions:** LFV + model building of NP, Neutrino physics, leptoquarks, Vcb issue, EFT, statistics for HEP, other hot topics in flavor physics, spectroscopy, CKM, new results from Belle when they will come out, more on LFU.

Our feeling is it is something useful to repeat regularly (2 times per year?) Lectures are recorded. Videos will be available on the web. We are considering to publish the lectures in a journal.

## Plans for 2018

• GDR-InF workshop: The future of the intensity frontier? Geneve, CERN, February 1-2

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

  Paris, IHP, 13th-14th February
- Mini-workshop on charmless B decays
   Paris, LPNHE, April/May (TBD)
- Event in common with GDR neutrino on lepton flavour in B decays

  March
- Doubly charmed baryon spectroscopy workshop
- Strong CP violation workshop Grenoble, April/May
- GDR-InF annual general meeting November

We need to follow our program keeping some room for flexibility and reactivity, in order to accommodate for our needs/whishes!

## Some additional comments

# Happy birthday to <u>our GDR!</u> Already one year old!



- **Anyone can make proposal**, either to Aoife and Francesco or to the conveners. The proposals are discussed in the conveners meeting.
- Anyone can volunteer to organise events.
- Let's try to coordinate when organising events of interest for the GDR-InF community, in order to avoid unneeded duplicates and increase synergy.
   (providing an early calendar can help here)
- Let's improve in GDR-InF « scientific production » (lectures recording, lectures publication, reports, etc...)