# Winter Workshop on "Recent QCD Advances at the Large Hadron Collider"

## Les Houches, Savoie

14<sup>th</sup> - 18<sup>th</sup> Feb. 2011

#### **Organizers:**

François Gelis (CEA-Saclay)
Christophe Suire (IPN-Orsay)
David d'Enterria (CERN)

#### **Topics of the workshop**

- Latest Quantum Chromodynamics results at the LHC:
  - including proton-proton (~70%) & Pb-Pb (~30%)
  - grouped in 4 big themes:
  - (1) Mostly non-perturbative QCD: inclusive hadron prod., diffraction, ...
  - (2) PDFs & low-x QCD: global fits, DGLAP/BFKL/CGC, ...
  - (3) perturbative QCD (I): jets, high-p<sub>+</sub>, direct photons, NNLO ...
  - (4) perturbative QCD (II): heavy-quarks & quarkonia
- 47 theoretical (23) & experimental (24) talks:

EXP: ATLAS (7), CMS (7), ALICE (5), LHCb (4), LHCf (1), TOTEM (cancelled)

TH: MCs: PYTHIA, HERWIG, SHERPA, CASCADE

PDFs: CTEQ, MSTW, HERAPDF, nPDFs

Small-x: AAMQS fits, phenomenology p-p & PbPb, ...

(N)NLO pQCD: jets, photons, high- $p_{\tau}$  had., heavy-Q (c,b,t), QQbar,

Diffraction-elastic-exclusive production, QQbar in QGP, ...

### Goals & organization of the workshop

- Discuss latest theoretical & experimental developments connected to the physics of the strong interaction at the highest energies ever:
- Share knowledge / techniques / experiences between: experiment – theory communities, proton-proton – heavy-ion communities,
- ❖ Talks organization: ~20 mins. talks with 10 mins. for questions:
  - Discussions strongly encouraged!
     (if needed, talks may be shifted to the next session)
  - Morning programme: 9:00 (sharp!) 12:00
  - Mid-day break (Mo., Wed.): 12:00 14:00
  - Mid-day ski break (Tues., Thurs.): 12:00 17:15 (sharp!)
  - Afternoon (Mo., Wed.): 14:00 19:00
  - Afternoon ski-day (Tues., Thurs.): 17:15 19:00

#### Other details ....

- Please upload your talk in the agenda web page: http://indico.cern.ch/conferenceTimeTable.py?confld=91353 (click on 'manage')
- Cocktail tonight at 19h:00
- Fee payments from 14:00 at Secretariat.
- After-lunchs/dinners: activities possible (games, fussball, ...) at ground floor of canteen (free coffee in main bldg., you can buy your eve. drink at restaurant before 21h30), internet (wifi) at main buildg.
- Free bus-pass (Chamonix valley) at the Secretariat on demmand
- Ski- breaks:
  - Prarion (ski-lift, parking lot, ski rental, ...) is ~5 mins car-drive. (main road downhill before downtown Les Houches).
  - 4-hours forfait = 28 EUR
  - (Light) snowing expected Monday (night) thru. Thursday.
  - Lunch-bags to be reserved at canteen 24h in advance
    - i.e. today at lunch-time for Tuesday.
    - i.e. Wednesday at lunch-time for Thursday.