

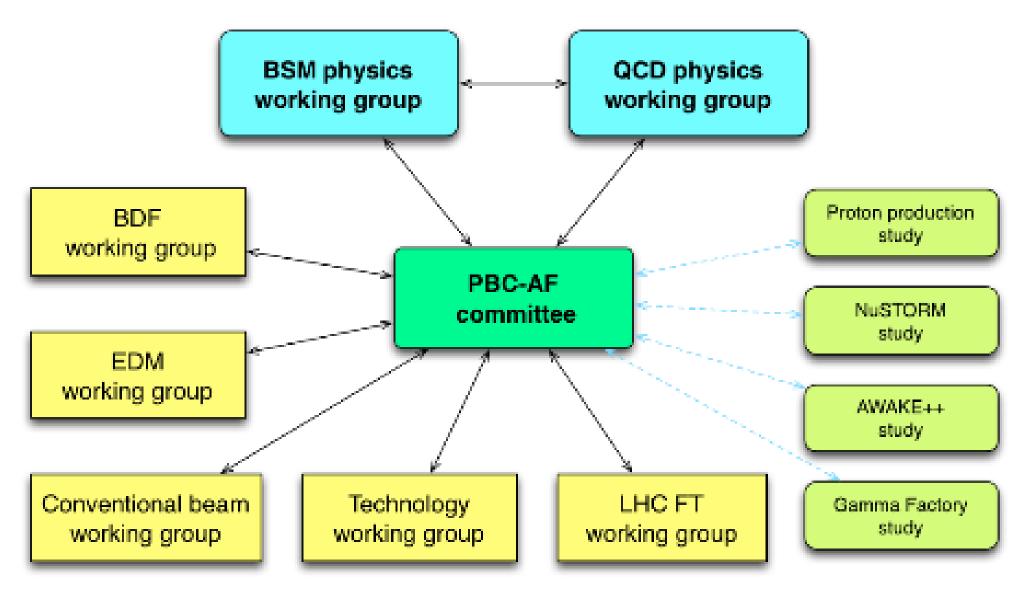
Physics Beyond Colliders Working Group Meeting CERN – March 1-2, 2017

Introduction to the QCD Working Group

Claude Vallée

Group composition
Group mandate
Personal view on some current issues

PBC GENERAL ORGANISATION



QCD WORKING GROUP MEMBERS

Core members not associated to a project:

- 2 theorists: Markus Diehl (DESY) and Jan Pawlowski (Heidelberg)
- 1 experimentalist: Gunar Schnell (Bilbao)

NB: all 3 have kindly agreed to act as conveners of the group

Projects representatives:

- Granziano Venanzoni (μ-e)
- Gerhard Mallot (COMPASS++)
- Jean-Philippe Lansberg (AFTER)
- Achille Stocchi (crystal)
- Juerg Schacher (DIRAC++)
- Gianluca Usai (NA60++)
- Szymon Pulawski (NA61++)

NB: Working group remains open to:

new ideas

(2nd open workshop to come)

and new members

(should contact the PBC coordinators)

QCD WORKING GROUP MANDATE

Deliverables for each proposed project:

- Evaluation of the physics case in the worldwide context
- Possible further optimization of the detector
- For new projects: investigation of the uniqueness of CERN siting

NB: the Working Group has a close connection to the PBC accelerator "Conventional Beams" and "LHC Fixed Target" subgroups, where the projects are also represented together with CERN accelerator experts.

The QCD physics working group should concentrate on the optimization of the physics output and detector layout, leaving technical aspects of the beamline to the accelerator working group

A PERSONAL VIEW ON SOME CURRENT ISSUES

Structure Functions/Spectroscopy:

Complementarity COMPASS++/LHC-FT and worldwide competition (RHIC, JLAB, JPARC...)

Heavy Ion Physics:

- Comparison of charm reach between NA61++, NA60++ and LHCb-FT
- Connections with the GSI/CBM and RHIC communities

New projects:

- Feasibility/options for the μ -e measurement and competition from e⁺e⁻ factories
- Added values of DIRAC++ and NA60++ revivals compared to previous projects
- Feasibility/fundamental motivation of baryon magnetic moment measurement with bended crystals