

Forward Physics Working Group Meeting

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Aim of the CERN meeting

- **Motivations:** plenty of new of topics to be discussed/presented at this meeting: cosmic rays, forward jets, soft diffraction with proton tagging, DPE jets, high ξ background, multiplicity studies, exclusive events...
- **Following the discussions in Calabria, we are happy to announce a new working group about techniques for forward physics (Michael Rijssenbeek, Joachim Baechler (tbc)):** this week, we will have three talks related to timing detectors
- **Twiki (thanks to Tim):**
<https://twiki.cern.ch/twiki/bin/view/LPCCForwardPhysics/WebHome>
- **We should start thinking about the aim and organisation of each working group in the view of the yellow report by April/May 2014 and the list of missing/ongoing items which will need further experimental or theoretical studies:** we will get a short report by each WG on Tuesday, to be followed by a discussion
- **CERN yellow report:** we plan to have a first discussion at the next meeting in October about the different parts/topic/chapters in order to get plans well established for the Cracow workshop
- **Dates of next meetings:**
 - **October 15-16:** CERN
 - **November 18-19-20-21 (morning):** Cracow
 - **January 14-15:** CERN
 - **Last week of February - 1st week of March?:** CERN
 - **April 21-15:** Trento

List of items from Calabria meeting

- Establish a reference table for each topic, names of people associated to each task, and timescale: can be updated when new ideas appear; reports are expected for each analysis at each WG meeting if possible
- Stress complementarity between experiments
- Low lumi: define the strategy for low lumi measurement (which μ ?), list of topics/people/benefitting from proton tagger
- Medium lumi:
 - Low lumi runs (1 week?), running bunches with low pile up
 - Which purity is needed for each measurement: dijets, γ + jet
 - Mueller Navelet jets, jet gap jets: new MC, predictions, combination of Totem (T1/T2) with CMS important
 - Proton dissociation
 - survival probability
 - Reggeon contribution? How to constrain it?
 - Meson production (LHCb, SD in ATLAS/CMS)?
 - Impact of detector resolution / acceptance on the measurement and how close we need to go to the beam (lower lumi: special run at low lumi, medium lumi: low intensity bunches)
- High lumi: Background is fundamental (back from the machine, splashes into the detectors, also background to the machine (Q6...))
- Technical aspects: backgrounds, detectors (timing...), simulation (geant, fluka)