

Forward Physics Working Group Meeting: convener/steering committee

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Contents:

- Discussion about organisation
- Discussion about yellow report

Organisation of the LHC Forward Phys. WG

- List of topics together with available people from each working group: we can identify uncovered items .
- Need to put in twiki acceptance/resolution in ξ and t for different low and high β^* configuration: important to study physics observables
- Define luminosity strategy at low/medium β^* , which amount of integrated luminosity for which pile up .
- Moving to CERN yellow report: will follow up from the list of topics; questions to be asked for each process to analysers
- 4 different parts in the yellow report: low, medium, high lumi, technical section
- How to get new results for the report? Define benchmark analyses to show complementarity between experiments
- CERN meeting on October 15 (morning): presentation by each WG to discuss the plans, list of topics
- Cracow meeting: plan of the yellow report with section assignments to people; Monday (low lumi, technical WG), Tuesday (medium lumi, technical WG), Wednesday (high lumi, future of QCD)
- Common introduction to be written by WG conveners: how to organise this? Convener meeting somewhere after the meeting in Trento?
- Trento meeting: Dates moved by one week to avoid Eastern: April 14 to 18

Low lumi working group

- Particle multiplicity and energy flow studies in forward region, link with cosmic ray physics, LHCf
- Central exclusive particle production
- Small x gluon (exclusive J/Ψ and Υ)
- Quarkonia production
- Drell Yan processes
- Plans for total, elastic, inelastic cross section measurements
- Single diffractive measurements: W , Z , jets...
- Rapidity gap vs tag (proton dissociation studies)
- Survival probability studies
- Underlying events
- Double parton scattering

Medium lumi working group

- Pomeron structure: DPE jets and gamma+jet events
- DPE jets measurement (including background)
- Diffractive Z, W production?
- BFKL signals: Mueller Navelet jets, jet gap jet
- BFKL signal in double J/Ψ production (BFKL ladder between two J/Ψ)
- Jet gap jet in diffraction
- Proton-heavy ion and ion-ion collisions: energy flow, proton tagging

High lumi working group

- Exclusive jet production
- Electroweak summetry breaking studies: anomalous couplings
- “Invisible” objects (magnetic monopoles...)
- Measurement of mass of SUSY particles
- NMSSM Higgs?
- sensitivity to high ξ background, reggeon region

Technical working group

- Timing detectors: quartic, diamond...
- Timing detector electronics: SAMPIC
- Silicon pixel detectors
- Movable beam pipes and roman pots
- Background studies (machine induced...)
- Forward detector alignment
- Forward scintillator counters
- Detector simulation