Workshop on Muon Identification at LHCb

Thursday, 15 October 2015 - Friday, 16 October 2015 INFN - Laboratori Nazionali di Frascati

Scientific Programme

The meeting aims at covering different aspects related to the MuonID optimization: physics requirements, detector operation and upgrade, trigger, algorithms and software. The agenda will evolve trying to cover all of these aspects.

From the experience of the last years, topics could include:

- muonID/misID at high luminosity
- impact on MuonID of hardware modification to the Muon System
- review of present/future algorithms
- review of analysis/results involving low p/pT muons
- review of analysis/results involving very high p/pT muons
- muon selection in the trigger (L0/Hlt)
- use of high level algorithms in Hlt
- interplay with the tracking system (study of DiF, global track+MS chi2,...)
- review of muon isolation algorithms
- the Muon only vs the Combined PID: how to optimize
- detector effects (inefficiency, alignment,...) on the final MuonID performance
- comparison between data and MC
- calibration (systematics, trigger unbias...)

We encourage anyone interested in developing one of the above topics or in proposing further ones, to contact us.

Hope to see you in Frascati!

Matteo, Barbara, Patrizia and Ricardo.