



WELCOME

Common Phase2 Muon and L1 Muon trigger
Workshop 28-30 of November 2018

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Introduction

- Muon and L1 Muon trigger are very strongly related projects which continuously interface and interact during the operation to keep a very efficient system.
- The Phase2 project also requires a very strong and common interface framework between Muon Phase-2 Upgrade and L1 Phase-2 Upgrade Groups
 - ❖ A common permanent forum for discussion is needed to bring the two communities together, to inform about the progress, define common strategies, identify a common area of work and possibly to share the resources.



Joint P2 Muon Upgrade + P2 L1 Muon Algorithms workshop: 28-30 Nov

<https://indico.cern.ch/event/768856/>

- This is a follow up to a presentation given by the P2 L1 Muon coordinators at the Muon Workshop on September, https://indico.cern.ch/event/752547/sessions/286575/attachments/1715689/2767789/L3vision_sep13_Muons_v3.pdf
- The first common workshop was announced there.
- The first of the regular workshops



Main areas and topics in agenda

Wednesday 28 Nov

- Overviews of muon trigger algorithms & detector upgrades
- Trigger primitive developments for Phase-2

Thursday 29 Nov

- Muon track algorithms (muons of all types)
- Trigger primitive developments for Phase-2
- Muon track algorithms (muons of all types)
- Architecture & discussion

Friday 30 Nov

- Special muon triggers (special muon types, topological multi-muon and cross-system triggers)
- Software Infrastructure
- **Discussion time - what was learned, what needs to be learned**



Goals

To review and discuss

- status with respect to Muon TDR and L1 Interim document
- present and discuss technical issues
- propose new ideas or new approaches
- identify communalities in the hardware solutions
- identify performance goals for the whole chain
- discuss/define common tests (demonstrators) to be performed during LS2/run3 to test the primitives and algorithms
- common tool developments
- simulation studies
- samples production.
- define common activities where to share resources
- identify milestones for short, medium, and long timeline: focus first on L1 TDR preparation.