



## **Laser System Evolution – Next 5 Years**

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## Laser : 5 Year Plan



Coarse 5 year plan, no detailed discussion of annual maintenance costs.

➢ 2012 (end of proton running) :

- Operation of three old laser as before.
- Commissioning and operation of the new laser.

▶ 2013/14 (shutdown) :

- Operation of ECAL still to be defined in detail, but not 24/7, 300+ days/year.
- Early in the shutdown, ideally some time to continue operation as in 2012 to follow recovery.
- Later in the shutdown, occasional operation to cross check.
- Carefull analysis of 2012 operational experience and revise understanding of optimal transparency change.
- Aim to replace old laser completely before restart of data taking in 2015 (?). Exact needs to be defined based on 2012 experience.

➢ 2015+ (after shutdown) :

- Further increase in radiation levels will pose additional challenges : Larger changes in EB, noticable damage and aging of VPTs, hadron damage, etc.
- Need to addapted monitoring system to optimally cope with the physics needs and the evolution of the detector.