

## **Experiments requirements and limitations for post-LS1 operation** - Emilio Meschi

The LHC will resume operation for physics in 2015, after a two year long shutdown, with an energy target of 13 TeV and a peak luminosity target of  $\sim 10^{34} \text{ cm}^{-2}\text{s}^{-1}$ . The physics goals will be rich, with difficult precision measurements of the properties of the newly found boson, as well as other equally important phenomena predicted by the standard model. With the higher energy, the experiments' communities will also be looking forward to the possibility of new physics beyond the standard model. The two programs, which sometimes have diverging demands on the accelerator, need to be reconciled to guarantee the highest scientific output of the LHC. In this talk, we review the running scenarios for the pp and HI collider run after LS1, in particular with respect to the bunch spacing and related issues (pile-up, triggers and reconstruction efficiency), but also to other aspects like bunch length, filling schemes, leveling, etc., as well as the experimental and technical challenges in the different scenarios.