



# LHC Seminar

SPEAKER: Nicholas Wardle (CERN)

TITLE: **Combined measurement of the Higgs boson mass in pp collisions at  $\sqrt{s} = 7$  and 8 TeV at the LHC**

DATE: Tue 31/03/2015 11:00

PLACE: Filtration Plant

## ABSTRACT

A measurement of the Higgs boson mass is presented based on the combined data samples of the ATLAS and CMS experiments at the CERN LHC in the  $H \rightarrow \gamma\gamma$  and  $H \rightarrow ZZ \rightarrow 4l$  decay channels. The seminar introduces the individual mass measurements and the underlying performance and calibration work. The final result is obtained from a simultaneous fit to the reconstructed invariant mass peaks in the two channels and for the two experiments.