ID contributo: **6** Tipo: **invited talk**

The ATLAS Insertable B-Layer: from construction to operation

ATLAS IBL is a fourth layer of pixel detectors, and has been installed in May 2014 at a radius of 3.3 cm between the existing Pixel Detector and a new smaller radius beam-pipe. The new detector, built to cope with high radiation and occupancy, is the first large scale application of 3D detectors and CMOS 130nm technology. The IBL detector construction was achieved within about two years starting from mid-2012 to the May 2014 installation in ATLAS, a very tight schedule to meet the ATLAS installation and detector closure before starting the Run2 in Spring 2015. The key features and challenges met during the IBL project will be presented, as well as its commissioning and operational experience in LHC.

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