International Workshop on Discovery Physics at the LHC (KRUGER2016)

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## **Results from ttH/VH searches in ATLAS**

Wednesday, 7 December 2016 14:30 (30 minutes)

Since the discovery of a Higgs boson by the ATLAS and CMS experiments at the Large Hadron Collider (LHC), the emphasis has shifted towards measurements of its properties and the search for less sensitive channels in order to explore any deviation from the Standard Model. The WH and ZH production modes, jointly denoted as VH, provide high sensitivity channels to observe Higgs boson decays to a bottom quark pair, which allows its coupling to quarks to be directly probed, as well as measuring its dominant decay mode. The associated production of the Higgs boson with top quarks (ttH) should also allow the direct observation of its coupling to top quarks. This channel also benefits from a large cross-section enhancement when increasing the LHC centre-of-mass energy from 8 to 13 TeV. ATLAS results covering the Higgs boson searches in the VH(H->bb) and ttH (H->bb, dibosons) channels will be presented, using approximately 13.2 fb-1 of pp collision data collected at the LHC with a centre-of-mass energy of 13 TeV.

## I intend to submit my contribution for the proceedings

Yes

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