

H- \rightarrow gammagamma search at ATLAS

In this talk the H- \rightarrow gammagamma search of ATLAS will be presented.

This decay channel is one of the most powerful ones at low values of the Higgs mass. A light Higgs boson is preferred by precision measurements of electroweak processes from various experiments. Results using 4.9 (possibly 5.2)/fb of proton-proton collision data collected during 2011 will be shown. During 2011 data taking, the pileup conditions changed dramatically after a technical stop; the average number of interactions per bunch crossing doubled from around 6 to around 12. That brings about new challenges. The emphasis of the talk will be on recent improvements to the sensitivity of the analysis and the latest results.

Primary author: SMESTAD, Lillian