

SAIP2014



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Latest measurements of Higgs boson properties with the ATLAS detector.

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Abstract :

The scalar particle found in the data collected in 2011 and 2012 was a trophy for the physics program of the CERN's Large Hadron Collider. Although the topologies and production rates were consistent with the ones predicted by the Standard Model theory of particle physics, dedicated analyses were needed to measure the various properties of the new boson. This talk gives details of the analyses designed to measure the mass, width, spin and coupling strengths of the 125-GeV Higgs boson, using the entire 25fb⁻¹ of data collected by the ATLAS experiment during the first phase of operations. The various measurements consolidate the particle discovered as a very Standard Model like Higgs boson.

Award :

No

Level :

N/A

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Paper :

Yes

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