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Higgs measurements from CMS and ATLAS

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The standard model (SM) of particle physics is a widely successful theoretical model, as it agrees with the vast majority of measurements in particle physics. However, the SM is not able to explain certain physical observations, leaving it unable to answer some open questions in particle physics. Among the particles predicted by the SM is the Higgs boson: a fundamental scalar boson, central to the SM and many of its predicted interactions. Because the Higgs interacts with most SM particles either directly or indirectly, it is an excellent tool for simultaneously validating the SM, and probing for physics beyond the SM (BSM). This motivates a substantial Higgs physics program at the ATLAS and CMS detectors based at the Large Hadron Collider (LHC) in Geneva, Switzerland. This talk will cover recent Higgs measurements from the ATLAS and CMS collaboration from Runs 2 and 3 of the LHC, and their comparisons to SM predictions.

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