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Top measurements from ATLAS and CMS

Wednesday 23 October 2024 09:00 (40 minutes)

The top quark, the heaviest known elementary particle, plays a crucial role in advancing our understanding of fundamental physics. In this talk, the latest measurements of top quark production and properties from the ATLAS and CMS experiments at the LHC will be discussed. Key results include precise cross section measurements of top quark pair production, single top quark production, and associated production channels at different center-of-mass energies, providing valuable insights into QCD and electroweak interactions. A recent highlight is the observation of quantum entanglement between top quark pairs, offering a unique perspective on quantum mechanics at the highest energies. The talk will also cover the most precise measurements of the top quark mass, a parameter that is essential for testing the internal consistency of the standard model.

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