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Theory - LHC Phenomenology

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The discovery of the Higgs boson at the Large Hadron Collider marks the culmination of a decades-long hunt for the last ingredient of the Standard Model. At the same time, there are still many puzzles in particle physics, foremost the existence of a relatively light Higgs boson, seemingly without any extra weak scale particles that would stabilize the Higgs mass against quantum corrections, and the existence of Dark Matter. This talk will give an overview of the most interesting theories that address these problems and how to test these theories at the LHC.