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Higgs inflation: connecting cosmology with particle physics

The mechanism of inflation has become an indispensable paradigm in the early evolution of cosmic history. In most cosmological models inflation is driven by a scalar field - the so called inflaton.
Similarly, the Higgs mechanism is an essential cornerstone of the Standard Model of particle physics. It also relies on a fundamental scalar field - the Higgs boson. The identification of both scalar particles with one another establishes a direct link between cosmology and particle physics. I will first give a brief review of primordial cosmology and afterwards discuss various aspects connected to Higgs inflation.