

**Plenarvortrag**

PV I Di 9:00 H01

**Particle Physics in the light of the LHC Run 2** — ●KLAUS  
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With the discovery of the Higgs boson in 2012 the LHC confirmed the last cornerstone the Standard Model of particle physics. This model describes beautifully all phenomena in particle physics but leaves big questions unanswered like the identity of dark matter or the asymme-

try between matter and antimatter in the universe.

The LHC just finished a successful run at 13 TeV collision energy delivering about  $150 \text{ fb}^{-1}$  of luminosity to the two large experiments, ATLAS and CMS and about  $6 \text{ fb}^{-1}$  to the specialised b-physics experiment LHCb. The large dataset from Run 2 has been used to search for new particles in so far unexplored mass and parameter regions and to perform precise measurements of Standard Model parameters and processes.