

## **CERN, LHC and the Higgs (35+10)**

*Thursday 16 June 2022 14:50 (45 minutes)*

Sweden was among the twelve countries that founded CERN - the European Laboratory for Particle Physics - in 1954. Since then it has grown into a scientific melting pot where thousands of physicists from all over the world work together to uncover what the universe is made of and how it works. Ten years ago, the ATLAS and CMS experiments at CERN's Large Hadron Collider (LHC) discovered the Higgs boson, a central ingredient in the standard model of particle physics. In only a few days, the LHC will start its third run after a period of extensive upgrades. The new data will allow the physicists to search for the physics beyond the standard model that is needed to explain for instance the dark matter in the universe and the asymmetry between matter and antimatter.

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