

## Experiments on antimatter at CERN

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One and a half decades after the first production of “cold” antihydrogen, first precision measurements of the properties of antihydrogen have recently begun. Together with the start-up of an additional dedicated low energy antiproton decelerator (ELENA), and the development of a wide range of techniques that permit precise atomic measurements, the study of antihydrogen atoms has started in earnest. This presentation will provide an overview of the present status and outlook for fundamental physics with antihydrogen atoms. A special focus will be put on future tests of gravity with antimatter and on the AEGIS experiment, which inter alia aims to measure the free fall of a pulsed beam of antihydrogen atoms over their parabolic trajectory, as well as on the technological developments from a variety of fields on which it relies.