



Contribution ID: 260

Type: **Talk**

Antihydrogen Detection in the ALPHA -Experiment

Friday, 15 February 2013 10:15 (20 minutes)

The principal aim of the ALPHA experiment is to trap cold atomic antihydrogen and study its properties, and, ultimately, perform precision comparison between hydrogen and antihydrogen atomic spectra. Recently, several important milestones have been achieved, including long confinement of antihydrogen atoms and the first spectroscopic measurements done on the antihydrogen atoms.

The main experimental tool for the antihydrogen detection in the experiment is the ALPHA silicon vertex detector. The detector consists of three concentric barrels of 144 double sided silicon sensors and provides information on the time evolution of antiproton plasmas and individual annihilation events. Characteristics of the detector will be given along with the current status of the experiment.

quote your primary experiment

ALPHA (CERN)

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Session Classification: Plenary 4