

PARTICLE DETECTION TECHNIQUES FOR ANTIHYDROGEN CONFINEMENT WITH THE ALPHA EXPERIMENT *

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Antihydrogen is the simplest atomic system composed entirely of antiparticles. Antihydrogen can be used to test CPT invariance by comparing the spectra of hydrogen and antihydrogen atoms. The ALPHA (Antihydrogen Laser Physics Apparatus) project at the CERN Antiproton Decelerator (AD) aims to confine antihydrogen atoms and perform spectroscopy on the trapped atoms. The trapping of antihydrogen is the principal goal of the first phase of the experiment. This talk will outline progress towards antihydrogen trapping, with particular emphasis on the particle detection techniques used in the experiment.

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