



Contribution ID: 1

Type: **Invited**

ELENA; The Extra Low ENergy Antiproton facility at CERN

Wednesday, 12 June 2013 09:00 (30 minutes)

The ELENA ring will decelerate the 5.3 MeV antiprotons from the AD (Antiproton Decelerator) to an energy of just 100 keV with the aim to increase by one or two orders of magnitude the number of usable antiprotons for the physics experiments. An additional experimental area will also allow the extension of the low energy antiproton physics program to new experiments. Beam cooling will be applied at an intermediate and extraction energies in order to obtain high density bunches which will be transported to the experiments via a new electrostatic beam transfer line.

The expected main performance limitations such as intra-beam scattering and tune shift due to space charge will be addressed and the status of some the most important sub-systems; ring magnets, electron cooling, beam instrumentation and vacuum system, will be reported.

Primary author: Dr MAURY, Stephan (CERN)

Presenter: Prof. OELERT, Walter (Johannes Gutenberg-Universität Mainz)

Session Classification: Facilities and Instrumentation

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