Contribution ID: 34 Type: not specified

Any Light Particle Search II

Monday 22 June 2015 15:35 (25 minutes)

Any Light Particle Search II (ALPS II) experiment (DESY, Hamburg) searches for photon oscillations into WISPs. This second generation of the ALPS light-shining-through-a-wall (LSW) experiment approaches the finalization of the preparation phase before ALPS IIa (search for hidden photons).

In the last years, efforts have been put for the setting up of two optical cavities as well as characterization of a single-photon transition-edge sensor (TES) detector. Such detectors have showed excellent results in infrared single-photon detections with a detection efficiency higher than 95% and an intrinsic dark count rate of 1.0° 10-4 sec-1 for 1064 nm photons.

In parallel, the setting up of ALPS IIc (search for axion-like particles), including the unbending of 20 HERA dipoles, have been pursued.

The latest progress in these tasks will be presented.

Primary author: Ms BASTIDON, Noëmie (Hamburg University)

Presenter: Ms BASTIDON, Noëmie (Hamburg University)