



ID de Contribution: 58

Type: **Ordinary**

COUPP: First data from a deep-site bubble chamber

vendredi 18 mars 2011 10:35 (15 minutes)

The COUPP collaboration uses bubble chambers to search for WIMP dark matter. These bubble chambers are sensitive to the ~ 10 keV nuclear recoils produced by WIMP scattering, but completely insensitive to the gamma and beta backgrounds that limit most dark matter direct detection experiments. Recent developments in acoustic discrimination between nuclear recoils and alpha decays have led to world-leading limits on spin-dependent WIMP-proton cross sections. In the summer of 2010 COUPP deployed a 4kg bubble chamber at SNOLAB. This chamber has already surpassed our recently published limits by a factor of ~ 5 , and will soon be competitive with the world-leaders in spin-independent as well as spin-dependent WIMP detection.

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Classification de Session: Astroparticles - Dark Matter

Classification de thématique: Experiment