

Abstract for an Invited Paper
for the APR08 Meeting of
The American Physical Society

New approaches to dark matter and neutrino detection

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Two new initiatives in astroparticle and neutrino physics will be discussed: COUPP employs ultra-stable heavy liquid bubble chambers to search for WIMP dark matter. First results leading to improved limits on spin-dependent WIMP couplings will be presented, together with the most recent progress and prospects. COGENT aims at the detection of very faint (~ 100 eV) signals in detectors massive enough (~ 1 kg) to allow searches for rare processes, using recently developed p-type point contact (ppc) Germanium detectors. The broad range of applications (coherent neutrino scattering, light WIMP searches, double-beta decay) available to these new semiconductor devices will be described. First results from their underground operation will be presented, as well as the status of an ongoing reactor deployment.