

Contribution ID: 619 Type: Parallel Session Talk

Results from the Final Runs of the CDMSII Experiment

Saturday, 24 July 2010 09:00 (17 minutes)

The Cryogenic Dark Matter Search (CDMS) is a world leader in sensitivity to Weakly Interacting Massive Particles (WIMPs). CDMS uses a combination of ionization and phonon energy to identify nuclear recoils arising from potential WIMP scatters. As published in Science vol. 327 p.1619, exposure from the final run of the CDMS-II detectors totalled 612 kg-days for the Ge detectors after data-quality cuts were applied. In this final run we observed 2 candidate events in our signal region with an expected background of 0.9+/-0.2 events. The probability to observe 2 events with our expected background is 23%, thus we cannot claim a WIMP detection. The combined CDMSII result excludes new parameter space in elastic and inelastic dark matter models. The analysis of the final CDMSII run will be described

Primary author: Dr KOS, Marek (Syracuse University/CDMS)

Presenter: Dr KOS, Marek (Syracuse University/CDMS)

Session Classification: 11 - Particle Astrophysics and Cosmology

Track Classification: 11 - Particle Astrophysics and Cosmology