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Recent Results from the COSINE-100 Experiment

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COSINE-100 is a direct detection experiment designed to test the DAMA/LIBRA collaboration's claim of observing an annual modulation signal attributed to dark matter interactions using NaI(Tl) crystals. From September 2016 to March 2023, COSINE-100 collected data with a 106 kg NaI(Tl) detector array at the Yangyang Underground Laboratory in Korea.

Several dark matter search analyses were conducted with a 1 keV energy threshold, including both model-dependent and model-independent tests of DAMA-like signals. In this presentation, we report updated results from physics analyses using an improved 0.7 keV energy threshold, including a comprehensive annual modulation search based on the full 6.4-year dataset.

Collaboration you are representing

COSINE-100

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