

# Status on COSINE-100 experiment

*Thursday 18 July 2024 14:48 (18 minutes)*

The COSINE-100 experiment aims to detect dark matter-induced recoil interactions in NaI(Tl) crystals to test the DAMA/LIBRA collaboration's claim.

Data taking operated from September 2016 to March 2023 at the Yangyang underground laboratory in Korea, utilizing 106 kg of low-background NaI(Tl) detectors.

The COSINE-100 experimental setup was moved to a newly built underground laboratory, Yemilab. Here, we will proceed with the detector design upgrade to enhance light collection and operate the COSINE-100U experiment. Furthermore, the COSINE collaboration is in the process of developing a high-purity NaI(Tl) detector for the upcoming COSINE-200 experiment.

In this talk, we will report on the overall status and the latest outcomes of the dark matter search in COSINE-100. Additionally, we will provide an update on the status of COSINE-100 and discuss prospects for COSINE-200.

## Alternate track

### I read the instructions above

Yes

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**Session Classification:** Dark Matter

**Track Classification:** 09. Dark Matter Detection