

## Progress of the COSINE-100U experiment

*Wednesday 27 August 2025 16:00 (20 minutes)*

COSINE-100, a direct dark matter search experiment, operated from October 2016 to March 2023 at the Yangyang Underground Laboratory, Korea, using 106 kg of low-background NaI(Tl) scintillating crystals. It is now being upgraded to COSINE-100U by relocating to the newly constructed Yemilab in Jeongseon, Korea. In the upgraded version, a novel encapsulation process has been applied to the primary detector, the NaI(Tl) crystal, resulting in an improved light yield of approximately 35%. The upgraded experiment is scheduled to begin operation in mid-2025. In this presentation, we will report the current status of COSINE-100U and its plans.

### Collaboration you are representing

COSINE-100

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