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The COSINUS Underground Cryogenic Facility

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Cryogenic Observatory for **S**ignatures seen in **N**ext generation **U**nderground **S**earches (COSINUS) will use cryogenic sodium iodide (NaI) calorimeters to search for dark matter. Recently, the construction of an underground facility at Laboratori Nazionali del Gran Sasso (LNGS) for COSINUS has been completed. The features of the COSINUS facility allow for a low background environment for rare event searches. This facility will house a dry dilution refrigerator, which will sit in a drywell inside a water tank. The water tank will be instrumented with photo multiplier tubes and serve as an active muon veto. Above the water tank, a clean room will allow for a clean environment for detector maintenance and installation. A vibrationally decoupled building next to the water tank will provide access to the clean room and hold a control room and maintenance rooms.

Submitted on behalf of a Collaboration?

Yes

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