

Cryogenic NaI based remoTES calorimeters for direct dark matter detection in COSINUS

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The COSINUS experiment (Cryogenic Observatory for **S**ignals seen in **N**ext generation **U**nderground **S**earches) is a low-threshold, cryogenic experiment being set up at Laboratori Nazionali Del Gran Sasso, Italy. It aims to provide a model independent cross-check of the DAMA/LIBRA findings of a potential dark-matter like modulating signal.

COSINUS utilizes a two-channel readout system based on transition edge sensors (TESs) that allows for particle discrimination. It consists of ultrapure scintillating sodium iodide (NaI) crystals read out using a novel remoTES scheme to measure the phonon signal of a particle interaction. A silicon beaker surrounding the crystals is used to measure the light signal from the same particle interaction. Results from the latest prototypes and updates on the setup will be presented in this contribution.

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