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## **COSINUS - Direct Search for Dark Matter with Cryogenic NaI Detectors**

*Monday, 14 June 2021 17:00 (20 minutes)*

In the summer of 2021, construction of the COSINUS experiment will begin at the Laboratori Nazionali del Gran Sasso in Italy. COSINUS (Cryogenic Observatory for Signatures seen in Next-generation Underground Searches) is a direct dark matter search experiment specifically designed to cross-check the signal reported by the DAMA/LIBRA collaboration since many years. Featuring high-purity crystals of the same target material (NaI) which are operated as cryogenic phonon detectors, COSINUS also provides a two-channel readout, a trait that is unique in the landscape of NaI experiments. Through the use of an additional channel measuring the scintillation light created in particle interactions in the crystal, particle discrimination becomes possible down to energies of few keV in recoil energy. In the talk, an overview on the status of the COSINUS experiment and its detection principles will be given, as well as an outlook on the first measuring phase.

### **Speaker**

Martin Stahlberg

**Presenter:** STAHLBERG, Martin (Max-Planck Institute for Physics)

**Session Classification:** Session 3