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Abstract for an Invited Paper for the APR17 Meeting of the American Physical Society

The ANDES Deep Underground Laboratory in South America: status and prospects XAVIER BERTOU, CNEA/CONICET

The construction of the Agua Negra tunnel through the Andes between Argentina and Chile is a unique opportunity to build a world class deep underground laboratory in the southern hemisphere, with 1750 m of rock overburden. At 30 degrees latitude south, far from nuclear power plants, it provides a unique site for Dark Matter searches and Neutrino experiments, and can host multidisciplinary experiments with a specific focus on Earth sciences given its location in a peculiar geoactive region. Its operation is foreseen to be coordinated by an international consortium and to start in 2026.

In this presentation the current status of the Agua Negra tunnel and the ANDES initiative will be reviewed, and the scientific programme of the planned laboratory will be discussed.