

## ANNIE in 10 minutes

*Monday, 26 June 2023 14:15 (15 minutes)*

The Accelerator Neutrino Neutron Interaction Experiment (ANNIE) is a 26-ton Gd-doped water Cherenkov R&D detector located upstream of the Booster Neutrino Beam (BNB) at Fermi National Accelerator Laboratory (Fermilab). The ANNIE physics goal is to study the neutron yield of the neutrino-nucleus interaction. The R&D effort focuses on using new photodetector technology, chemical additives, and novel detection medium. Two cutting-edge detector technologies have been deployed in a neutrino beam by ANNIE for the first time: Large Area Picosecond Photodetectors (LAPPDs) and Water-based Liquid Scintillator (WbLS). This talk reports on ANNIE's physics goal and detector status.

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