# Toward CEvNS Detection with Low-Threshold $CaWO_4$ Cryogenic Detectors

*Dr. Thierry Lasserre*

*Institute for Advanced Study, Technische Universität München*

This seminar will cover recent progress on the NUCLEUS and CRAB experiments, both targeting low-energy nuclear recoils in the 50–200 eV range with cryogenic detectors. NUCLEUS aims to observe coherent elastic neutrino-nucleus scattering from reactor antineutrinos using low-threshold $CaWO_4$ calorimeters. After successful commissioning at TUM, preparations are underway for deployment at the Chooz (France) reactor in 2026. CRAB is a novel method for direct sub-keV calibration of nuclear recoils using neutron capture. It has been commissioned at the TRIGA reactor in Vienna, towards enabling precise characterization of detector materials like $CaWO_4$ and $Al_2O_3$.