

Abstract Submitted
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Practical Experience of Signals Processing Using Digitizers

MARK SIKORA, MOHAMMAD AHMED, Duke University — Experiments at HI γ S and TUNL are increasingly replacing analog electronics with digitizers. This overhaul requires offline algorithms to extract experimental observables from the raw detector waveforms. The new routines must be tailored to the unique characteristics of the detector output and in the context of the pulsed time structure of the beams produced at the two labs. To date, data has been collected and analyzed using NaI, LaBr₃, high-purity germanium, and organic liquid scintillator detectors in both neutron and photon experiments. The algorithms which have been developed in the course of this analysis will be presented.

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