

Electronics for a 16 Channel BGO Scintillation Detector

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Abstract

A new electronics for 16 channel scintillation detector based on BGO crystals is described. A front-end preamp for PMTs amplifies and shapes anode pulses for fast and spectroscopy outputs. A 16 channel discriminator unit discriminates fast signals by amplitude and selects the useful events. The fast ADC implements 16 channels of peak detector and hold circuit followed by conversion section and CAMAC interface in a double width CAMAC module. The developed electronics is incorporated into multiparameter PC-based DAQ system.