

A MULTI TIME SCALE TRIGGER TO SEARCH FOR SUB-MILLISECOND BURST PHENOMENA

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Searching for extremely short GeV γ -ray bursts using atmospheric Cherenkov telescopes, requires a trigger sensitive on various time scales. In this paper we describe a digital trigger based on a reprogrammable gate array providing sensitivity in the time scale from $100ns$ to $10\mu s$ in which atmospheric Cherenkov detectors may be competitive. Such a system may find applications in a wide variety of research involving fast signals.