



Contribution ID: 108

Type: **Oral Presentation**

GPUs for fast triggering in NA62 experiment

Saturday, 11 June 2011 09:00 (30 minutes)

We discuss an approach for using commercial graphic processors (GPUs) at the earliest trigger stages in high-energy physics experiments, and study its implementation on a real trigger system in preparation.

In particular we focus on the possibility to reconstruct rings in a Cherenkov detector as building block of a selective trigger condition for rare decay search.

Latency and processing rate measurements on several state-of-the-art devices are presented, and the potential issues related to processing time jitter and data transfer throughput are discussed.

Primary author: LAMANNA, Gianluca (CERN)

Co-author: MARCO, Sozzi (Pisa INFN)

Presenters: LAMANNA, Gianluca (CERN); MARCO, Sozzi (Pisa INFN)

Session Classification: Trigger and DAQ Systems

Track Classification: Trigger and Data Acquisition Systems