



cherenkov
telescope
array



40 Gbps Data-Acquisition System for NectarCAM

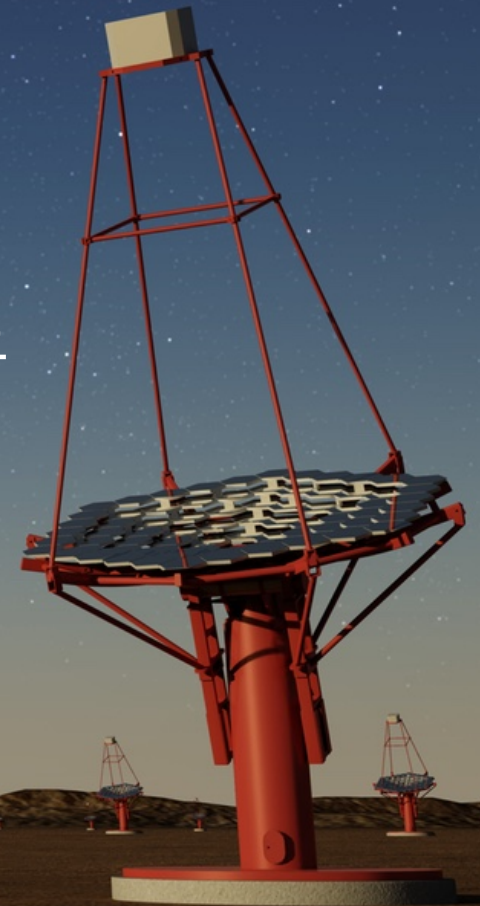
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Context : CTA



- The Cherenkov Telescope Array is a future observatory dedicated to gamma ray observation
- CPPM is involved in the DAQ of NectarCAM which will equip Middle Size Telescopes
- I will address the main aspects of the development of the whole acquisition chain :
 - How we set up a synchronous DAQ stimulator able to send UDP packets on 265 gigabit Ethernet ports spread in time on ~ 100 ns
 - How we managed to smooth the fluctuating traffic due to random trigger
 - How we developed a camera event builder able to process a 40 Gb/s inbound data rate with off the shelf equipment.