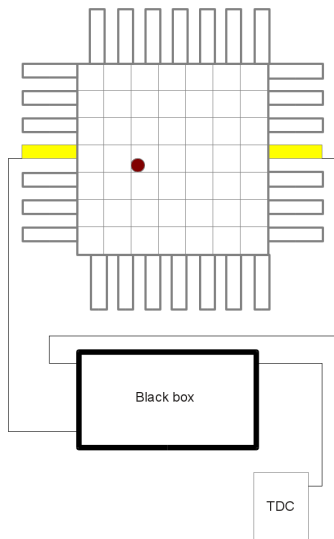


# Trigger description



- The first channel (Ch0) of each TDC board is always receiving a copy of the same signal called the Particle Trigger and this signal is used as a reference for all the PMTs of the TOF stations.
- The Particle Trigger signal is generated by hardware logic units in the DAQ racks (the black box in the diagram). It is given by the first coincidence of the PMTs connected to the same slab from the chosen station.
- The time of the coincidence signal is the time of the latest signal arriving to the logic unit.

# Problems

- The absolute values of all delays in the trigger system are unknown. See [mice.iit.edu/micenotes/public/pdf/MICE0251/MICE0251.pdf](http://mice.iit.edu/micenotes/public/pdf/MICE0251/MICE0251.pdf) for detailed explanation.
- New trigger system based on programmable FPGA logic is under development. This will probably make the black box a bit more transparent.