

## Tracking detector for muon systems at very high energy colliders

Tracking detectors for the muon system at high energy colliders have to fulfill many specifications including high coordinate and time resolutions while keeping reasonable cost for the areas of 1000's of square meters. In the talk we will present major specifications for the muon detectors parameters as well as the results of the studies of the scintillating plastic extruded strips with WLS fibers and SiPMs readout which is an excellent candidate to serve as a muon system tracking detector. Time resolution of such a detector is a fraction of ns and position resolution (along the strip) can reach a few cm reducing complexity of the muon system design, construction and operation.

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