Title:

Scintillating Fibre Tracking

Abstract:

This presentation will provide an overview of the fiber tracker upgrade for LHCb to be installed during LS2, and the required performance and major challenges to be addressed. The detector construction challenges include the need to cover a very large area of detector area using precision fiber-ribbons and necessity of splitting fibers at the detector mid-plane to limit the impact of light attenuation on signal. Other issues to be covered include the design of a custom ASIC to readout the 600,000 channels, operation of silicon photo-multipliers at very low temperature and radiation effects on the fibers and readout SiPMs.

Speaker (and experiment) :

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