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Tile Multiple Readout and Beyond for FCC.

Dual-Readout Compensated Calorimetry with Tile Sensors Friday, March 19, 2021 2:40 PM (20 minutes) We discuss techniques and materials to develop optimize the energy resolution in the long-term performance of calorimeters as required by the challenging environment of future colliders and high intensity experiments. We extend the Dual Readout/Cerenkov compensation by using 2 tile types, one sensitive to to e-m showers, such as quartz, aerogel, Teflon AF or other low index Cerenkov tiles, and scintillator tiles, sensitive to low energy particles such as neutrons, nuclear fragments. The many advantages over fiber calorimeters for dual readout are discussed.

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Collaboration / Activity

FCC

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