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The Semi-Digital Hadronic Calorimeter

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The Semi-Digital Hadronic CALorimeter (SDHCAL), developed within the CALICE collaboration, is proposed to equip the future ILD detector of the ILC.

A technological prototype has successfully provided excellent results in terms of energy linearity and resolution but also tracking and PID capabilities.

To validate completely the SDHCAL option for ILD, new R&D activities have started. The aim of such activities is to demonstrate the ability to build large detectors (> 2m²) GRPC with a new version of readout electronics and a new detector interface board with the aim to have the capability to address up to 432 ASICs of 64 channels each by the latter.

In addition, a new mechanical structure using electron beam welding is used to build the mechanical that will host the active layer made of GRPC and their embedded electronics.

Time Zone

Europe/Africa/Middle East

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