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Development of the HGICAL frontend system for the CMS experiment

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At TIFR, we are participating in the development, fabrication and assembly of intricate stepped and non-stepped hole (NSH) frontend electronics boards, baseplates with insulation, and large area Copper-Tungsten (25:75) composite material plates, to be used as an absorber in the electromagnetic section of HGICAL. The overall development employs close interaction with Indian electronics and powder metallurgy industries and translates these efforts into the final product with desired specifications. NSH prototype boards have been recently fabricated, followed by extensive mechanical and electrical tests at TIFR and CERN. Similarly, PCB-based baseplates have been fabricated in India and delivered in large numbers to the collaboration as a part of the pre-series production campaign for the prototype HGICAL detector. This talk will cover these R&D efforts carried out at TIFR.

Session

Future Experiments and Detector Development

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