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Calibration and Rate Measurements of a Digital Hadron Calorimeter BURAK BILKI, EDWIN NORBECK, YASAR ONEL, University of Iowa, JOSE REPOND, LEI XIA, Argonne National Laboratory, CALICE/DHCAL COLLABORATION — The calibration procedure of a finely granulated Digital Hadron Calorimeter (DHCAL) with Resistive Plate Chambers (RPCs) as active element is performed with a stack of nine layers exposed to the Fermilab test beam. The broad-band muon beam is used for calibration. Measurement of rate capability of RPCs is performed with proton beams of variable intensity. Performance parameters of the RPCs such as the efficiency and the pad multiplicity are investigated as a function of beam and detector specifications.

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