

Response of the DAMPE BGO Calorimeter to Heavy Nuclei

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A BGO calorimeter was built for a high energy cosmic ray experiment, named the DArk Matter Particle Explorer (DAMPE), which was launched in the end of 2015. In order to determine the response of the calorimeter to heavy nuclei, an experiment was carried out with 40 and 75 GeV/A ion beam at CERN SPS. The performance of the calorimeter, including quenching effect of the BGO crystal, the energy resolution and the loss of ions due to nuclear interaction, are investigated. Some details about orbit performance are also presented in this report.

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