

UPPER LIMITS ON THE ISOTROPIC GAMMA RAY / COSMIC RAY RATIO FROM THE GRAPES III EXPERIMENT AT OOTY

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We have operated the GRAPES III air shower array, which consists of 217 scintillation detectors (each 1m^2) and 16 muon detectors (each 35m^2), for the last two years at Ooty in southern India. Total detection area of the muon detectors (560m^2) is very large among the currently operating air shower arrays in the world. So we can determine the number of muons in each air shower with relatively high statistical accuracy. We have considered muon poor showers as candidates for showers initiated by primary gamma rays. We present our results on the upper limits for the isotropic gamma ray / cosmic ray ratio in the energy range of 10 TeV to 1000 TeV and compare them with results from other experiments.