

# Search for gamma rays above 30 TeV from the Crab Nebula with the GRAPES-3 experiment

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The GRAPES-3 is a high-altitude, near-equator extensive air shower array at Ooty, India which is designed to observe cosmic and gamma rays in TeV-PeV energy range. It consists of a dense array of 400 scintillator detectors operating in conjunction with a  $560\text{ m}^2$  area muon telescope. Due to recent improvements in the measurements of shower arrival time and size and age dependent corrections for shower front curvature, the angular resolution of the array has been significantly improved ( $0.4^\circ$  at 30 TeV). Also employing an efficient rejection of the cosmic ray background using the muon content of the shower, a search for gamma rays above 30 TeV from the Crab Nebula has been performed. The results will be presented during the conference.

## Keywords

GRAPES-3; Crab Nebula; Gamma ray; cosmic ray sources;

## Collaboration

other (fill field below)

## other Collaboration

GRAPES-3

## Subcategory

Experimental Results

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**Session Classification:** Discussion

**Track Classification:** Scientific Field: GAI | Gamma Ray Indirect