

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

For the GRAPES-3 collaboration

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What is this contribution about?

This work is about detecting the multi-TeV γ -rays from the Crab Nebula by leveraging the good angular resolution of the GRAPES-3 array and rejecting the background cosmic rays.

Why is it relevant / interesting?

Detection of γ -rays from the Crab Nebula will be used as a performance study of the GRAPES-3 experiment for detecting the cosmic ray sources.

What have we done?

The angular resolution was obtained from the Moon shadow method after which a detailed background study has been carried out to see the γ -ray excess from the Crab Nebula direction.

What is the result?

In the results, we will compare the reduced background level after the rejection of the cosmic rays with the events observed along the direction of the Crab Nebula.