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## **A novel analysis methodology for gamma/hadron separation with the MAGIC telescope**

### **Abstract content**

Currently, the MAGIC telescope is the largest (17m) and most sensitive operating Imaging Air Cherenkov Telescope. With an energy threshold of 50 GeV, MAGIC is capable of constraining various high energy emission models of galactic and extra-galactic sources by bridging the unexplored 10-100 GeV energy range. One of the main experimental challenges to ground-based gamma-ray astronomy is the discrimination between gamma rays (signal) and cosmic rays (hadron background), particularly for gamma rays of energies below 100 GeV. We have developed a novel analysis method that actively searches for hadrons, exploiting previously neglected information. We will demonstrate the performance of the method on Crab Nebula data taken recently by the MAGIC telescope.

**If this paper is presented for a collaboration, please specify the collaboration**

### **Summary**

### **Reference**

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