ONLINE ICRC 2021
THE ASTROPARTICLE PHYSICS CONFERENCE
Berlin | Germany
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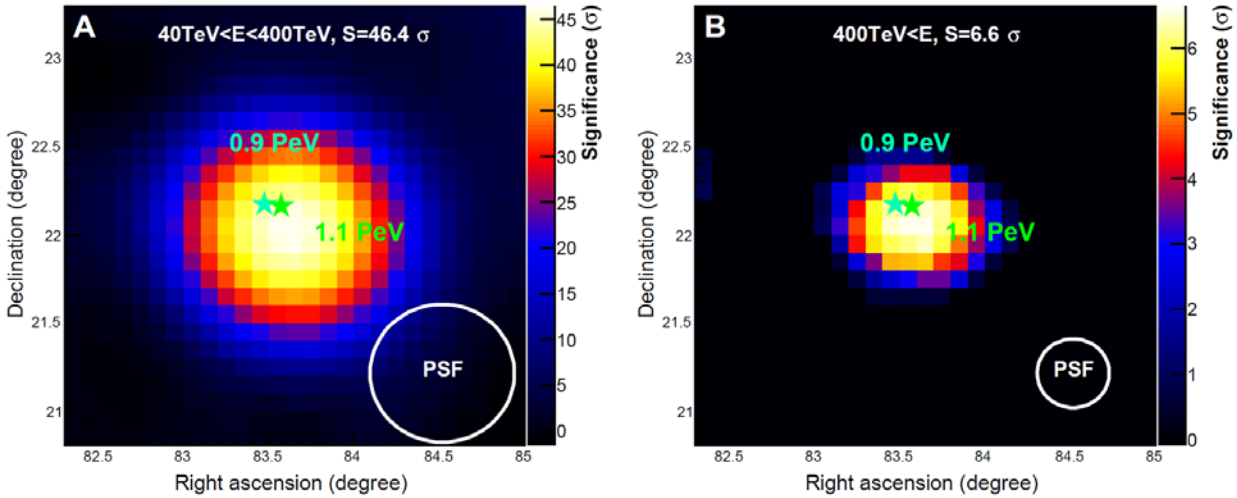
Highlight

Lingyu Wang On behalf of the LHAASO collaboration

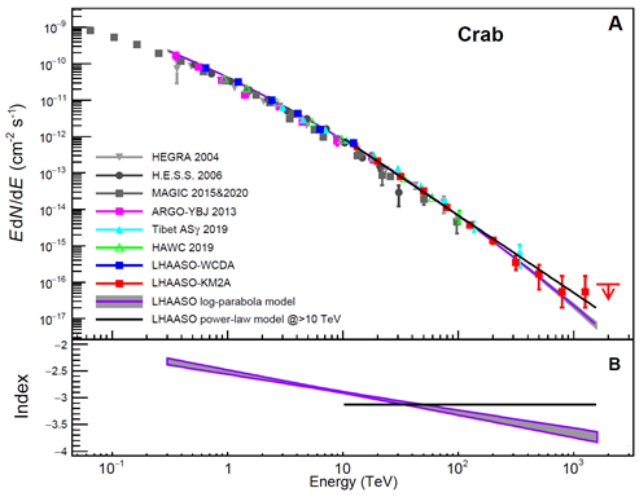
LHAASO 高海拔宇宙线观测站

✓ Observations of the Crab Nebula

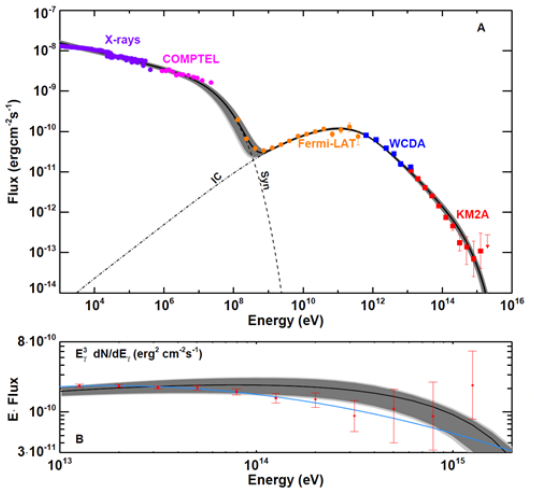
- ✓ **The detection of PeV photons implies an acceleration rate that overcomes the synchrotron losses of the parent electrons up to PeV energies, with an acceleration rate exceeding 15% of the theoretical limit**
- ✓ **Within the idealized synchrotron-IC one-zone model, the spectral points from 10 TeV to 1 PeV agree with the IC γ-ray prediction within the statistical uncertainties.**
- ✓ **Between 60 and 500 TeV, a deviation of 4 σ significance indicates a steeper spectrum than the one-zone model predictions.**



Significance maps of the Crab Nebula



Flux and fitting results



Spectral energy distribution