

Observations of the brightest UHE Gamma-Ray Sources With the LHAASO-KM2A

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Cosmic rays are high energy particles that come from outside of the solar system. It plays an important role in the evolution of our Galaxy. Gamma rays, produced by cosmic rays, are unique probe of cosmic rays and their accelerator. As a key sub-array of the Large High Altitude Air Shower Observatory (LHAASO), KM2A is the most sensitive gamma-ray detector at ultra-high energy (UHE, $>100\text{TeV}$). Here, we report two of the brightest UHE sources, LHAASO J1908+0621 and LHAASO J2018+3651. The morphology and spectral energy distribution of this two region are studied respectively using the KM2A data collected from December 2019 to December 2020. The origin of the UHE gamma-ray emission is also discussed taking into account multi-wavelength observations.

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Subcategory

Experimental Results

Primary author: Ms WU, sha (中国科学院高能物理研究所)

Co-authors: Ms HOU, chao (中国科学院高能物理研究所); CHEN, songzhan (Institute of High Energy Physics(IHEP),CAS); LIU, Ruoyu (DESY); FANG, jun (云南大学)

Presenter: Ms WU, sha (中国科学院高能物理研究所)

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