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Energy-dependent Morphology of J1825-137 with HAWC

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The luminous pulsar wind nebula (PWN) HESS J1825-137 was the first object in gamma-ray astronomy that was discovered to have energy-dependent morphology. In addition to its detection and this discovery by H.E.S.S., J1825-137 and the region around it have been explored and characterized also using the VERITAS, Fermi-LAT, HAWC, and LHAASO instruments. Its exceptional TeV luminosity has been associated with a potentially very short pulsar birth period and it is one of the most powerful emitters in the sky also at ultrahigh energies (several hundred TeV). Recently, HAWC has been able to resolve the individual sources in this complex region. In this contribution, we present an energy-dependent morphological study of J1825-137 based on HAWC observations up to ultra-high energies.

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