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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 ultra-high 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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