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Observation of Horizontal Air Showers with LHAASO-KM2A

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LHAASO-KM2A is a sub-array of the Large High Altitude Air Shower Observatory (LHAASO) with an area of 1.3 km^2. It consists of 5195 electromagnetic detectors (EDs, 1 m^2 each) and 1171 muon detectors (MDs, 36 m^2 each). Horizontal Air Showers (HAS) are a fundamental tool to detect penetrating particles like neutrinos and to study hadronic interactions. HAS detected at ground are mainly constituted by secondary muons. In this contribution first observations of HAS with LHAASO-KM2A are reported. We discuss the zenith angle distribution of EAS and the transition from electromagnetic-dominated showers to muon-dominated ones above a zenith angle of 60 degree.

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