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Latest results on dark matter searches with H.E.S.S.

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The nature of dark matter (DM) is one of the most debated questions of contemporary physics. Ground-based arrays of Cherenkov telescopes such as the High Energy Spectroscopic System (H.E.S.S.) search for DM signatures through the detection of very-high-energy (VHE, $E > 100$ GeV) gamma rays. DM particles could self-annihilate in dense environments producing VHE gamma rays in the final states that would be eventually detected by H.E.S.S.. The H.E.S.S. observation strategy to search for DM focuses towards the Galactic Centre (GC) region and nearby dwarf galaxies satellite of the Milky Way. The GC dataset provides the most stringent constraints on the DM annihilation cross section in the mass range 300 GeV - 70 TeV for the continuum and line DM signals. Searches have been carried out towards classical and ultra-faint dwarf galaxies to test specific DM models such as the Wino. The latest results towards the GC and dwarf galaxies will be shown.

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