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CTA Dark Matter searches in dwarf galaxies, dark halos, and galaxy clusters

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The Cherenkov Telescope Array (CTA) represents the next-generation ground-based gamma-ray observatory in the energy range between 30 GeV and 300 TeV. It will open the window to gamma-ray searches for annihilation or decay of heavy (TeV) Weakly Interacting Massive Particles (WIMPs) in astrophysical Dark Matter (DM) budgets with unprecedented sensitivity. In this talk, I will review the current prospects for WIMP searches with CTA in dwarf spheroidal galaxies orbiting our Milky Way, enhanced annihilation in close-by dark halos, and galaxy clusters of the local Universe. I will also outline the current knowledge of the DM targets and foreseen observation strategies, on which the success of the searches crucially depends.

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