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Current constraints on WIMP dark matter

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With gamma-ray observations from Fermi-LAT, cosmic-ray observations from the Alpha Magnetic Spectrometer 02 on board the International Space Station, and with collider data at the LHC and direct detection underground experiments, we are at last probing WIMP dark matter candidates masses and cross-sections. I will discuss the current status of constraints on WIMP scale dark matter from collider, direct and indirect searches. Moreover, I will show that there is still a compelling case for continuing indirect studies of the Fermi-LAT data. Current advances of dark matter searches in gamma rays include both analyses of observations towards the galactic center and inner galaxy and also of close-by dwarf galaxies.

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