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Antiproton constraints on Dark Matter

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The current antiproton data from PAMELA imposes constraints on annihilating and decaying DM which are similar to (or even slightly stronger than) the most stringent bounds coming from Fermi gamma rays, for hadronic channels and with fiducial choices for the astrophysical parameters. The implications of the most recent data by AMS-02 will be discussed. In fact, these constraints can be improved by slightly less than one order of magnitude and even able to probe the thermal relic DM in the range 30-200 GeV, for hadronic channels. I then explore the capabilities of early AMS-02, data to reconstruct the underlying DM properties in the case of a positive detection of a significant excess (attributed to DM annihilations) over the background.

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