Recent Results from the AMS-02 experiment

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The AMS-02 experiment is a particle physics detector in space. The instrument is taking data since May 2011 onboard the International Space Station, and it is devoted to the precise measurement of cosmic rays in the GeV to TeV range, as well as to the search for primordial antimatter and dark matter. In this seminar the detection technique of cosmic rays will be described, together with the performance of the AMS-02 detector. The recent measurements concerning the flux of cosmic particles up to the TeV region will be discussed, and some phenomenological implications outlined. Particular emphasis will be given to the AMS measurement of electrons and positrons fluxes, together with their interpretations.