SEARCH FOR LIGHTLY IONIZING PARTICLES WITH THE MACRO DETECTOR

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We present a search for fractionally charged particles in the cosmic radiation using the MACRO detector. They are searched for by using tracking information from the streamer tubes and energy loss measurements from the scintillator subsystem. The MACRO energy threshold makes the search sensitive to charges as low as e/5. The 90% confidence level flux upper limit is below $10^{-15} \,\mathrm{cm}^{-2} \,\mathrm{sec}^{-1} \,\mathrm{sr}^{-1}$.