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Pion Polarizability at CERN COMPASS MURRAY MOINESTER, Tel Aviv University, CERN COMPASS COLLABORATION — The electric α_π and magnetic β_π charged pion Compton polarizabilities provide stringent tests of Chiral Perturbation Theory. The combination (α_π-β_π) was measured at CERN COMPASS via radiative pion Primakoff scattering (Bremsstrahlung of 190 GeV/c π^-s) in the nuclear Coulomb field: $\pi+$ Z $\rightarrow \pi + \gamma+$ Z. This reaction is identified experimentally by virtue of the very small momentum transfer to the target nucleus; and is equivalent to $\gamma+ \pi \rightarrow \gamma + \pi$ Compton scattering for laboratory γ's of order 1 GeV/c incident on a target pion at rest. COMPASS data analysis (assuming $\alpha_\pi + \beta_\pi = 0$ based on theory) gives a preliminary value of $\alpha_\pi = -\beta_\pi = (1.9 \pm 0.7_{\rm stat.} \pm 0.8_{\rm syst.}) \times 10^{-4}$ fm^3.

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