

APR18-2018-000715

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Abstract for an Invited Paper
for the APR18 Meeting of
the American Physical Society

The nucleon axial radius, its determination and implications

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The nucleon axial radius, r_A^2 , is an important quantity governing the nucleon response to electroweak probes. Its uncertainty dominates the error bar for neutrino-nucleon charged current quasielastic scattering, a key signal process at long baseline neutrino experiments. Recent developments are reviewed, including the reanalysis of data from neutrino scattering at deuterium bubble chambers and the reinterpretation of muon capture on hydrogen as a measurement of r_A^2 ; these processes currently provide the best constraints on r_A^2 . The talk concludes with an overview of current and future theoretical and experimental efforts for improved measurements of r_A^2 .