

Abstract Submitted
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Precision measurements of muon capture on the proton and deuteron with MuCap STEVEN CLAYTON, University of Illinois, MUCAP COLLABORATION — The MuCap collaboration recently released a first result of a measurement of the singlet capture rate Λ_s for the muon capture process $\mu + p \rightarrow n + \nu$, unambiguously determining the pseudoscalar form factor g_P of the charged electroweak current of the proton; The final results of this analysis on g_P and the experimental situation will be presented. As a follow up experiment the collaboration is planning a measurement of the muon capture rate on the deuteron to 1% precision. This would provide the most accurate experimental information on the axial current interacting with the two nucleon system and determine the low energy constant L_{1A} relevant for solar neutrino reactions and the SNO experiment.

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