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The muon capture rate uncertainties¹ FRED MYHRER, S. PAS-TORE, K. KUBODERA, University of South Carolina — Recent measurements favor a larger value for the nucleons axial coupling, g_A which affects the muon hydrogen capture (MuCap) rate and together with the recently modified neutron mean life can influence the reactor anti-neutrino flux. We have evaluated the MuCap rate and the anti-neutrino proton reaction cross section within an effective field theory and focus the presentation on the origins of the limited theoretical accuracy for the evaluated MuCap rate to be compared with the very accurate measured capture rate.

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