Contribution ID: **166** Type: **Oral Presentation**

Nucleon electromagnetic form factors using N_f=2+1+1 twisted mass fermion ensembles at the physical mass point

Tuesday, August 9, 2022 2:20 PM (20 minutes)

We present results for the nucleon electromagnetic form factors using N_f=2+1+1 twisted mass lattice QCD with clover improvement and with quarks with masses tuned to their physical values. Our preliminary analysis includes three ensembles at similar physical volume and lattice spacings a ∼0.08 fm, ∼0.07 fm, and ∼0.06 fm allowing us to take the continuum limit directly at the physical mass point. For each ensemble we assess excited state effects using several sink-source time separations in the range 0.8 fm - 1.6 fm, exponentially increasing statistics with the separation.

Primary authors: ALEXANDROU, Constantia; KOUTSOU, Giannis (The Cyprus Institute); SPANOUDES, Gregoris (The Cyprus Institute); FINKENRATH, Jacob; JANSEN, Karl (DESY); HADJIYIANNAKOU, Kyriakos (University of Cyprus); CONSTANTINOU, Martha (Temple University); CONSTANTINOU, Martha (Temple University); BACCHIO, Simone (The Cyprus Institute)

Presenter: KOUTSOU, Giannis (The Cyprus Institute)

Session Classification: Hadron Structure

Track Classification: Hadron Structure