

Day 1

Discussion session

Moderator
Luis Alvarez Ruso

Alessandro, Noemi, and Saori

Omar

- **Flux-folded event-rate:** can near detector help reducing the impact of our poor knowledge of cross-sections? What about DunePrism?
- **Slide 4:** Could you please elaborate on “reverse horn” mode?
- **^2H :** To what extent the agreement with the data is due to the fitting of the neutron structure function?
- **Model dependency** of the 1p1h vs 2p2h contributions: is 20% vs 80% truly observable?
- What does **scaling** imply? How can we reconcile y-scaling with the two-body current contributions in the QE transverse response?
- Scaling in **isospin-asymmetric nuclei**: being two-body currents larger in pn pairs, how does this impact Ar vs Ti?
- **Degeneracy:** how to pin down the differences among the models using (e,e'p)

Lorenzo

- **Connection to pionless EFT:** additional remarks, elaborating on Hilla's comments
- **Vector and axial-vector couplings:** any feeling on their size?
- **Strange quark:** how are dispersion relations utilized to integrate out the strange content?
- **Wilson coefficients:** how to relate ChPT LECs to the Wilson coefficients? Is Lattice QCD playing a role?

Assumpta

- **Volume extrapolation:** derivation of the exponential formula
- **Finite momentum:** additional challenges arising from the momentum dependence of electroweak current operators
- **Elastic form factors:** any updates?
- **Transition form factors:** are LQCD calculations of nucleon transition form factors feasible at $m_\pi \sim 139$ MeV? Connection to Eliecer's talk

Eliecer

- **Axial current:** PCAC relates the axial current at $Q^2 = 0$ to the pion-nucleon cross section (Adler, Sato).

Has the axial current been compared to data in this way?

- **Unitarization:** comparison/differences with DCC model and Regge (Raul)
- **Two-pion production:** how to make the transition to the DIS region? Avoid double counting
- **CQ:** could you elaborate on the origin of this contribution to pion production?
- **Final-state interaction:** elaborate on classical vs quantum mechanical approaches