

Draft Outline of NUINT02 Sessions

Possible (co-)convenors indicated in parentheses

1. Motivation (Para, Itow, Mine, Vagins)
2. Existing data and outlook for running and approved experiments (Sakuda, Kielczewska)
3. Neutrino/nucleon scattering (Bodek, Hayato)
 - Topics include relevant electron and neutrino-scattering data, duality, form factors, inclusive and exclusive channels, etc
4. Neutrino/nucleus scattering (Keppel, Vogel)
 - Topics include relevant electron-scattering data, nuclear models and calculations, etc.
5. Final-state interactions (Paschos, Walter)
 - Topics include relevant electron-scattering data, formation zones, transparency models, etc.
6. Event generators and software tools (Casper, Rubbia)
 - Topics include comparison of results from different codes, talks on specific physics issues addressed in different models; might also include recipes for carrying out various calculations. Unlike theory talks in the previous sessions, here the focus should be on mature ideas which are ready for direct application
7. Future directions (Morfin)
 - Topics include possible future experiments and new theoretical approaches to be explored
8. Discussion and summary (Lipari, Seki)
 - One possible format would be to have a panel discussion or open forum on the morning of the last day, followed by the conference summary talk.

Names suggested as possible speakers

Harry Lee (ANL) or Toru Sato (Osaka): Dynamics in $\Delta(3,3)$ production

Guang-Lie Li (IHEP, Beijing): Axial vector current and nuclear effects

Omar Benhar (?): Nuclear response functions for Fermi gas calculations

Lalit Seghal (?): Resonant reactions (?)

K. Furuno (Tohoku?): BNL bubble-chamber data re-analysis

Sergei Kulagin (?): nuclear effects in low-x, low-q region of nuclear scattering

Paolo Lipari (INFN, Rome): Conference summary

Manny Paschos (Dortmund): Coherent pion production

Steve Wood (JLAB): Modeling of nuclear transparency at JLAB

Arie Bodek (Rochester): Structure functions and duality

Hallsie Reno (Iowa): Tau neutrino interactions and structure functions

Partial list of other possible topics (without names)

Proton decay backgrounds

Long-baseline analyses and neutrino cross-sections

Neutrino cross-sections and supernova modeling

Update on NuTeV and systematic studies

One or more talks on K2K results

Status report on MiniBooNE pilot run

Status report on ICARUS results

Comparison of neutrino generator results

Recoil nucleons in the Fermi gas model (a lively topic last year!)

The “correspondence principle” and the Fermi gas model (we learned a lot about the transition between nucleon and parton targets – aka quark/hadron duality – at NUINT02; I would like to similarly understand the transition between the region where the details of nuclear structure are important and the Fermi gas regime: how does the former evolve into the latter?)

Formation zones and modeling of final-state interactions – how should they be modeled and what is the effect?

“Few”-pion production and hadronic final states (performance of Lund vs. other approaches?)

Strangeness production (what do we know, and how do we describe it)

Nuclear evaporation (what happens to a nucleus after a neutrino hits it)