Workshops, Conferences and Schools Working Group

Conveners: Artur Ankowski, Raquel Castillo Fernandez, and Clarence Wret

Outline

- Busy few months of neutrino interaction workshops, schools and conferences!
- Pre-NuInt primer school (São Paulo, April 11-13, 2024)
- NuInt (São Paulo, April 15-20, 2024)
- NuSTEC summer school (CERN, June 5-13, 2024)
- Pre-NuInt workshop or school (Mainz, October 2-4, 2025)
- NuInt (Mainz, October 6-11, 2025)

Pre-NuInt Primer

- São Paulo, April 11-13, 2024
- Closely connected to NuInt topics, with lecturers staying for NuInt
- LOC: Hélio da Motta, Orlando Peres, Ana Amélia Machado, Anibal Bezerra, Franciole Marinho, Gustavo Valdiviesso, Irina Nasteva, Laura Paulucci
- Program committee: International NuInt'24 Committee
- Mainly aimed at students and junior postdocs
- About 35 participants

https://indico.fnal.gov/event/59963

Pre-NuInt Primer

- Overview of the current status of neutrino-nucleus scattering, highlighting both experimental and theoretical aspects of the field
- The program included lectures on nuclear effects in neutrino-nucleus scattering, the connection between neutrino interaction studies and oscillation physics, and cross-section measurements. Special attention was paid to the use of generators, including sessions with hands-on exercises
- Lectures/classes by: Deborah Harris, Alexis Nikolakopoulos, Artur Ankowski, Callum Wilkinson, Lorenzo Andreoli, Kajetan Niewczas, Steven Gardiner, Clarence Wret, and Daniel Cherdack

Pre-NuInt Primer

- Theory (1 day). Covered topics: oscillation physics, neutrino interactions at the nucleon level, introduction to nuclear effects, and specific nuclear models

- Generators (over 1 day). Talks and hands-on exercises: from theoretical background to actual event generating, and analyzing their distributions

- Experiments: excellent overview by Daniel Cherdack

NuInt’24

- São Paulo, April 15-20, 2024
- LOC: Hélio da Motta, Orlando Peres, Ana Amélia Machado, Anibal Bezerra, Franciole Marinho, Gustavo Valdiviesso, Irina Nasteva, Laura Paulucci
- International NuInt’24 Committee: Artur Ankowski, Adi Ashkenazi, Sampa Bhadra, Omar Benhar, Flavio Cavanna, Yoshinari Hayato, Natalie Jachowicz, Jorge Morfin, Jonathan Paley, Federico Sanchez, Michel Sorel, Hirohisa Tanaka, Morgan Wascko, Clarence Wret, Un-ki Yang
- 115 participants (48 researchers/professors, 24 postdocs, 43 students) from Brazil (40), USA (39), UK (7), Belgium (4), Poland, CERN, Spain, and Japan (3 each), Germany, France, Canada, and Italy (2 each), China, Korea, Argentina, Peru, and Israel (1 each)

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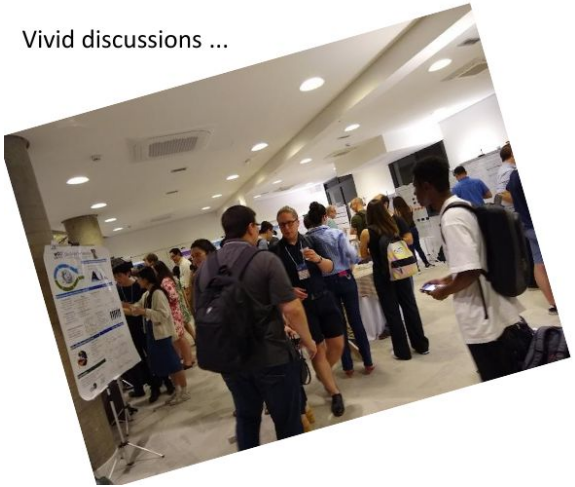
NuInt’24

- Flux predictions and measurements
- Event generators
- QE + 2p2h
- Pion production
- Low-energy interactions
- Non-neutrino scattering
- Impact of scattering uncertainties on measurements

Vivid discussions ...



and a lot of best posters !

and other topics (high-energy interactions, BSM physics, etc.)

See the details at https://indico.fnal.gov/event/59963/timetable/#20240415

NuSTEC Summer School

- CERN, June 5-13, 2024
- Organizing Committee: Vedran Brdar, Albert de Roeck, Joachim Kopp, Laura Munteanu
- International Advisory Committee: Artur Ankowski, Adi Ashkenazi, Stephen Dolan, Vishvas Pandey, Joanna Sobczyk, Clarence Wret
- 75 participants
- Lectures on theoretical modeling of neutrino–nucleus interactions in various energy regimes, neutrino cross-section measurements, Monte Carlo simulations, and physics at long-baseline neutrino experiments

https://indico.cern.ch/event/1331901/

NuInt'25: October 6-11, 2025 in Mainz

- LOC: Sonja Bacca, Luca Doria, Lukas Koch, Joachim Kopp, Asia Sobczyk, Alfons Weber (chair)
- Mainz is 20 km from Frankfurt Airport. Frequent global connections.
- Train from airport to Mainz every 30 min (€5.60/trip)
- Many hotels in Mainz, with prices starting from €80/night
- Venue located on the Mainz University Campus: a lecture theater in a new building (capacity 200 people)

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See you all at the next event!