

Neutrini and nuclei, challenges and opportunities for nuclear theory

May 27 - 31, 2019

ECT*

European Center for Theoretical Studies
In Nuclear Physics and Related areas



Objectives

- Neutrino oscillation experiments explore wide ranges of energies, where different reaction mechanisms are at play. Their description poses a formidable task to the nuclear and particle physics communities.
- This workshop aims at defining the best strategy towards its successful realization.
- The discussions will be mainly focused on three different topics:
 - ❖ Assess the extent and validity of EFTs in describing processes involving relatively high values of energy and momentum transfer
 - ❖ How to transition to regions where single-nucleon excitations, resonance- and meson-production occur
 - ❖ How to properly incorporate relativistic effects

Format

- Theory oriented workshop: participants with nuclear- and hadron-physics backgrounds
- Specialized and focused talks aimed at initiating discussions
- 2 long talks in the morning and 2 long talk in the afternoon (~1 hr), we will not strictly enforce the time schedule to allow for questions and discussions
- Discussion section at the end of each day (1 hr) : more questions and discussions on the different talks we assisted during the day

Useful Info

- We start at 9.30 am and we finish around 6 pm
- Lunches and Coffee break will be hosted at Villa Tambosi and kindly offered by ECT*
- Social dinner: Tuesday, May the 28th @ Ristorante Patelli, Trento city center. Please let Ines know today if you plan to attend