



## Workshop on Neutrino Near Detectors based on gas TPCs

8-9 November 2016

CERN

Europe/Zurich timezone

Search

The workshop, taking place in the framework of the CERN neutrino platform, will review the state of the art in TPCs and other detectors required to build the challenging near detectors for the future.

In order to match the increasing systematic precision required for future long baseline oscillation experiments, near detectors are submitted to increasingly stringent requirements to match the far detector response in performance and solid angle. Also they have to provide the cross-sections and other ancillary measurements that are necessary for the analysis of neutrino oscillations.

The T2K ND280 detector is based on active targets surrounded by TPCs and calorimeters; in view of T2K phase II, a study to upgrade it with new TPCs is ongoing, with the aim of minimizing dead regions and maximizing the acceptance. Near detectors using high pressure TPCs have also been suggested for T2K/HyperK and DUNE: they might provide sufficient mass to gather a number of neutrino interactions that can be examined in great detail and provide important input to model nuclear effects.

## NON - TPC items

- connection with WAGASCI
- connection with Time-of-flight and calorimeters
- timing from TPC detector itself?

- 1) APERITIF ( aperol spritz et focaccia )
- 2) ANTIPASTO ET MONTI
- 3) MEDAILLON DE BŒUF AUX TROIS CHAMPIGNOS AVEC FRITES ET LEGUMES
- 4) DESSERT ( tiramisu)
- 5) CAFE ET LIMONCELLO
- 6) VIN ROUGE ( Primitivo en Btl 0.75 Cl)
- 7) MINERALE

Le menu vous est proposé au prix de 50 CHF tout compris.

Dans l'attente des nouvelles de votre part, nous vous souhaitons une bonne journée.

RESTAURANT LA MEYRINOISE  
CH : Antoine Verchère 1  
1217 Meyrin  
Tel : 0227821930

- ND280 off-axis detector upgrade (Immediate thrust)
- R&D towards T2K/HyperK or DUNE HP-TPC near detector.
- Intend to submit funding request ITN to EU with CERN as member
- intend to submit proposal to CERN SPSC as activity on neutrino platform

#### Short term

- Need to connect with people informed about making TPCs and garnish agenda
  - field cage and mechanics
  - readout planes
  - construction, calibration
  - electronics
  - reconstruction etc..
- RD51 (Emilio Radicioni)
- AIDA2/ILC(Sefkow, Benke, Colas, ....)
- ALICE (Klempt, other?)

## Practical info

Audrey Deidda is the workshop secretary

Workshop fee is 120 CHF including dinner, 4 coffee breaks and 2 lunches.

we will be in Charpak's room (6th floor oval room)  
vidyo available.

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