

Preliminary Program (version 2: October 31st 2013)

ICFA neutrino panel European meeting 8-10/01/2014 Paris

⇒ **Emphasis on Accelerator based neutrino oscillation experiments and projects**

Wednesday 08/01/2014

9h00 – 10h30

Neutrino Physics (theory/phenomenology) :

Oscillation phenomenology review

Importance of CP violation discovery in the leptonic sector

Sterile neutrino in the global picture

10h30 coffee break

11h00 – 12h30

How to address the mass hierarchy

Potentials for MH with non-accelerator projects:

-Reactors -Atmospherics

-How to assess MH statistical significance in future projects

CP violation: what are the various possible strategies to access it?

-Experimental aspects, baselines,

- Statistics versus systematics

Discussion time:

14h00 – 16h00

Current experimental reports and prospects on MNSP and MH in coming 5 years

-Status of running accelerator experiments

T2K, Minos/Minos+, Nova

CNGS/OPERA and Icarus,

-Status of reactor experiments

Double Chooz, Daya Bay and Reno

-Status of atmospheric experiments

SuperKamiokande,

Antares , Icecube

16h00 coffee break

16h30 – 18h30

- Status of solar experiments

SuperKamiokande, Borexino,...

-Sterile neutrino searches

Accelerators : Microboone

Reactors and sources

Summary: Progress on PMNS matrix and sterile in coming years with running or approved projects

Discussion Time

Thursday 09/01/2014

9h00 – 10h30

European studies on future options:

Accelerator projects and R&D

CN2PY, Protvino
MICE,
NuSTORM facility
Short Base line?

Alternative Neutrino sources:

European Spallation Source
Daedalus (not really European ?....)

10h30 coffee break

11h00 – 12h30

Detector R&D and European projects

-Laguna-LBNO
-GLACIER
-MEMPHYS
-LENA
-MIND
-.....

14h00 – 16h00

Underground sites and facilities in Europe

-Status and possible development of underground laboratories

CANFRANC
LNGS
Modane
Pyhäsalmi mine
Others...

16h00 coffee break

16h30 – 18h30

- Neutrino facilities and detectors;

Comparison of performances for MH and CP phase

LBNO-LBNE joint effort for physics assessments.

- Hyper-Kamiokande developments

-View from some structures: APPEC on the Horizon 2020 opportunities, CERN?

Discussion time: are we able to focus on an optimal project for the coming 10 years?

Friday 10/01/2014

8h30 – 10h00

-Status of the neutrino cross section knowledge

Theoretical presentation on ν interactions

-Status of the hadroproduction knowledge and requirements

-Related experimental efforts

Hadroproduction

NA61/Shine and future similar projects?

Neutrino cross section measurements:

Minerva, MicroBoone

10h00 coffee break

10h30 – 12h30

Session on dedicated R&D projects and CERN oriented activities

- Neutrino facility

- Detector prototyping

- etc...

14h00 – 15h00

Project status and R&D report from the other regions

-Asia

-US

15h00-16h00

Round Table and Conclusions

16h00 coffee break and end of the meeting