



**European Neutrino Oscillation Experiments**

**Towards a roadmap**



This will be the first activity of the NEU2012 network, a discussion meeting between physicists of the neutrino community on the future of accelerator neutrino physics in Europe.

Will be present, in particular:

- members of the neutrino panel of the CERN SPC;
- members of the organizing committee of the CERN workshop on New Opportunities in the Physics Landscape at CERN that will be held on 11-13 May 2009 at CERN.
- physicists representing European projects in neutrino physics



## CERN workshops:

In the workshop in May, the new CERN directorate is targetting the non-LHC physics that could be made at CERN.

Physics of neutrino oscillations is (apart from CNGS) absent from the agenda, although a workshop dedicated to neutrino physics is foreseen at a later stage. (fall 2009)

*The discussion on CERN injectors however is a critical point, since this choice, which will need to be made in 2010, can either allow or forbid (or postpone considerably) a high power extension that could drive a neutrino factory a super-beam or a beta-beam.*

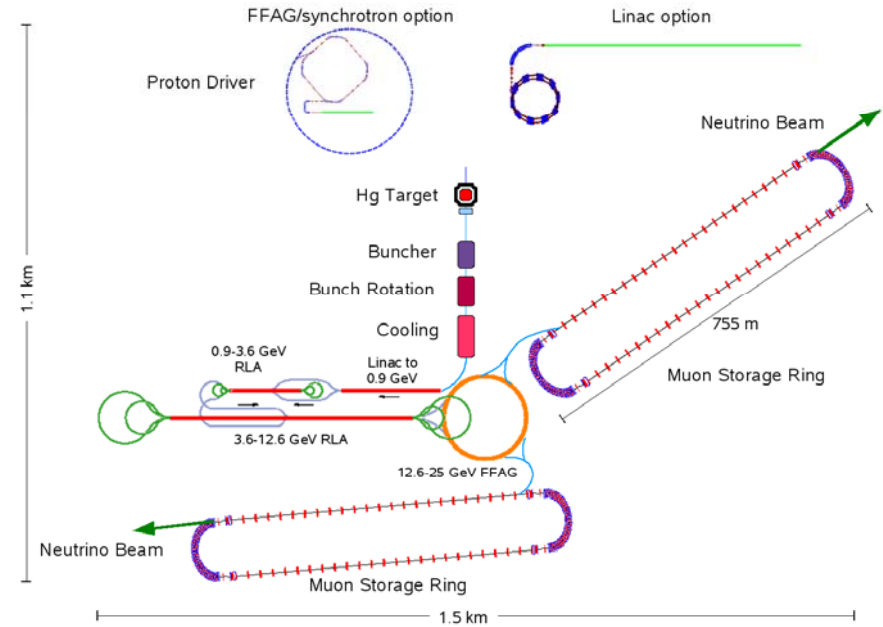
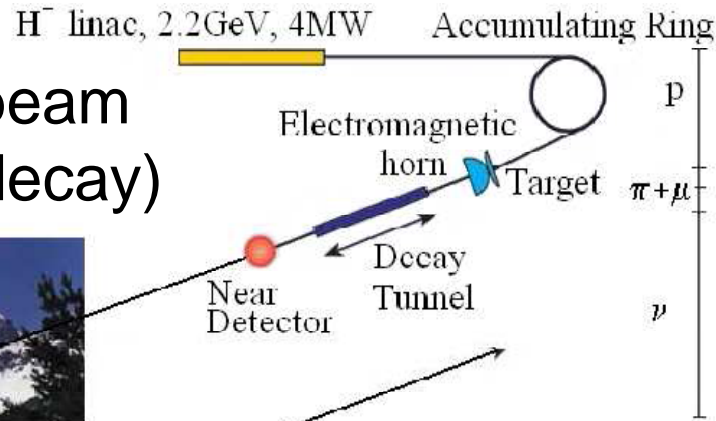
This meeting today intends to initiate the effort to assemble our neutrino physicist network whose task will be to establish a neutrino road map, in a way to be decided together, so as to be in a position to express in a consistent way the scientific interests of the community.



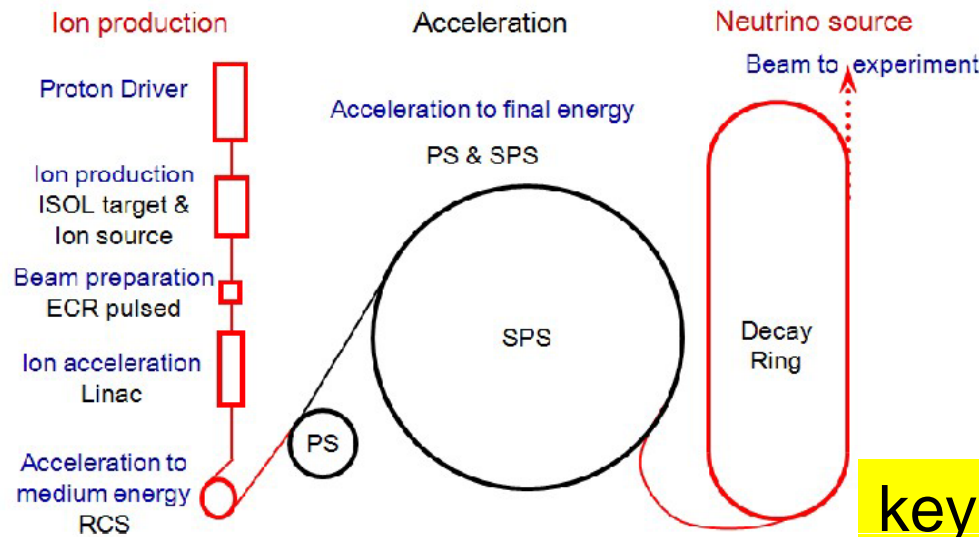


# EUROν

superbeam  
(pion decay)



Neutrino Factory  
(muon decay)



Beta-beam  
ion decay  $6\text{He}$ ,  $18\text{Ne}$  or  $8\text{Be}$ ,  $8\text{Li}$

key question for us:  
can/should any of this  
be at CERN? Which?

Two jobs related to the CERN workshops:

Input to the May workshop: abstracts due by April 1st  
There will be a session on 'future projects'... and LHC injectors  
Should we send abstracts? Which?

The neutrino community will be asked to provide input  
to the dedicated neutrino workshop.



# Writing the European Neutrino Oscillation Roadmap

Have agreed to contribute:

## Theory

Manfred Lindner

John Ellis (POFPA)

José Bernabeu

## Experiments

André Rubbia (LAGUNA)

Antonio Ereditato (CHIPP-OPERA)

C. Rubbia et al (ICARUS)

Francesco Terranova (INFN-OPERA deputy)

David Wark (T2K International spokesperson)

Hervé de Kerret (DCHOOZ)

Agnieszka Zalewska

Marcos Dracos (IN2P3)

Marco Zito (DAPNIA-EUROnu SB)

Alessandro Baldini (MEG spokesperson/Marco Grassi

will also include EUROnu (NF) (Long),

EUROnu (BB) (Lindroos or other) EUROnu (Rob Edgecock)

+ Alain Blondel, Silvia Pascoli and Fanny Dufour



# Networking

**There are already (too) many meetings.  
We should discuss on the best organization**

**We have:**

CERN workshop in May 11-13 2009

11th International Workshop on  
Neutrino Factories, Superbeams and Beta Beams  
July 20-25, 2009 — Illinois Institute of Technology — Chicago

NNN09 (South Dakota)  
September, 2009

CERN workshop in the fall09  
etc... etc...

