NuSTORM 26-26 March 2013 CERN

Welcome and introduction

Welcome

- Coffee breaks: we may need to go to the restaurant, self service
- Dinner transportation has to be timely:

26 Mars 18:10 de 18:10 Bat 866 aile D et dépôt des personnes au restaurant 1 (Glassbox)

- <u>864-1-C02</u> tomorrow
- Please keep timing!
- Hope you will enjoy

864-1-C02



Next Generation neutrino facilities

EU Strategy

- Long Baseline (MH, CP)
- World Wide Collaboration
- Staging

How to get there

- Building test Facilities including crucial Technology Features
- Evaluate, with accuracy, physics reach and potential for high precision measurement facilities
- Worldwide collaborative efforts to pave the way to a high precision neutrino and muon program

vSTORM gives essential opportunities to evaluate/test

- Production/capture of pions
- Transport/Injection
- Magnets
- Instrumentation/Diagnostics
- o Detectors
- o Etc.

vSTORM has discovery potential

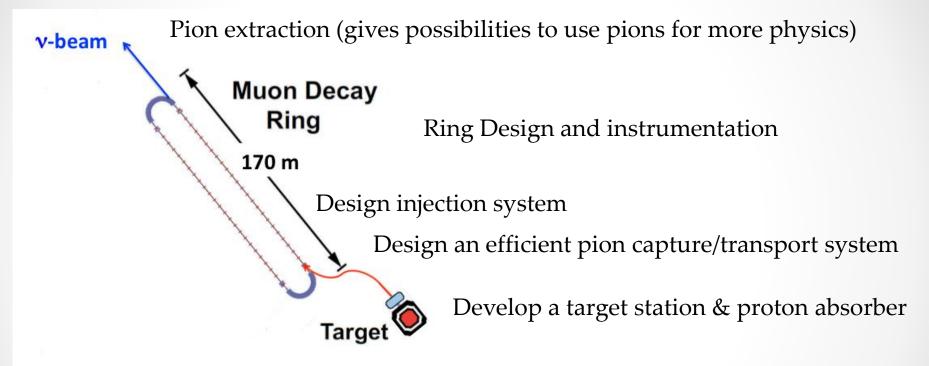
- \circ $v_{\rm e}$ and $v_{\rm e}$ -bar cross-section
- Sterile neutrinos
- 0 ...

Workshop aim

- Set up and sign an EOI to get support to:
- Investigate in detail how vSTORM could be implemented at CERN (CDR, TDR)
- Develop options for decisive European contributions to the vSTORM facility and experimental programme if vSTORM done elsewhere
- vSTORM would give essential information to go further to develop neutrino/muon physics facilities



The facility



Find a suitable proton beam (Energy, pulse length, structure, etc.)

vSTORM potential compared classical neutrino production on target