

# Facility for exquisite precisions

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- Day Bay & Reno results:
  - CPV discovery conceivable; emphasizes control of systematics critical
- Scientific priorities:
  - MH; CPV; Precision measurement;
- Gamma=100, Beta beam plus SPL/Frejus super-beam:
  - Opportunity if shown to be cost effective relative to NF [EUROnu]
- Neutrino Factory
  - Offers:
    - Best discovery reach; best precision
  - Flexible, can be developed in an incremental fashion:
    - nuSTORM:
      - $\nu_e$  and  $\nu_\mu$  cross sections; search for sterile neutrino
    - Incremental implementation of IDS-NF baseline
      - Stage I: existing proton source; no cooling
        - » CPV & MH discovery potential excellent
      - Stage II: IDS-NF 10 GeV/2000 km
        - » Exquisite sensitivity and precision
- European Strategy must include European contributions to:
  - First step(s) towards high-precision, long-baseline facility:
    - nuStorm; &
    - Work required to bring forward proposal for implementation of facility over ~5 years in time for the next strategy update [implies resource]