



The ESS ν SB Neutrino Oscillation Design Study

CP violation at the 2nd oscillation maximum

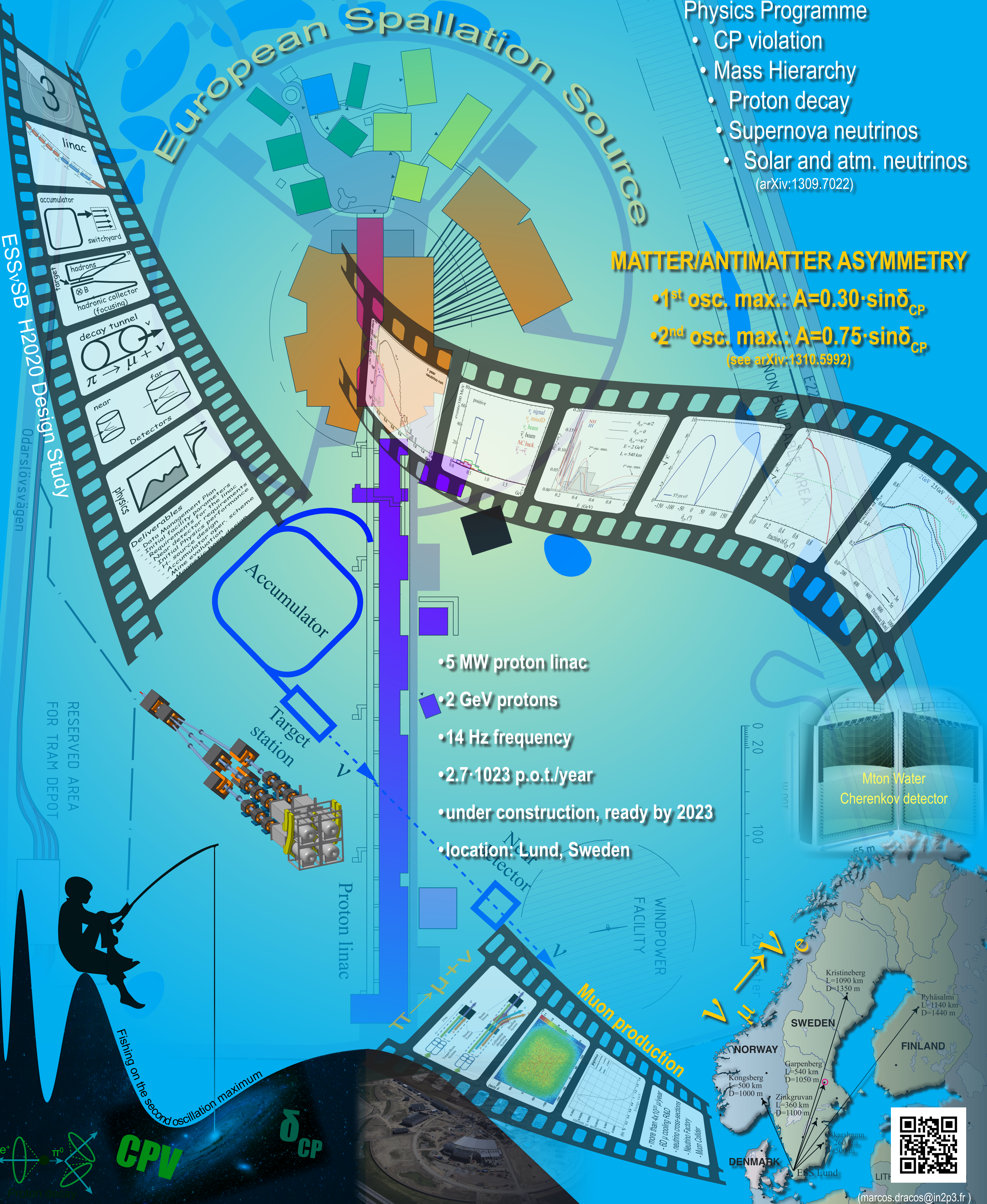
(presented by E. Baussan and M. Dracos)

Physics Programme

- CP violation
 - Mass Hierarchy
 - Proton decay
 - Supernova neutrinos
 - Solar and atm. neutrinos
- (arXiv:1309.7022)

MATTER/ANTIMATTER ASYMMETRY

- 1st osc. max.: $A=0.30 \cdot \sin\delta_{CP}$
 - 2nd osc. max.: $A=0.75 \cdot \sin\delta_{CP}$
- (see arXiv:1310.5992)



- 5 MW proton linac
- 2 GeV protons
- 14 Hz frequency
- 2.7 · 10²³ p.o.t./year
- under construction, ready by 2023
- location: Lund, Sweden

CPV
 δ_{CP}

