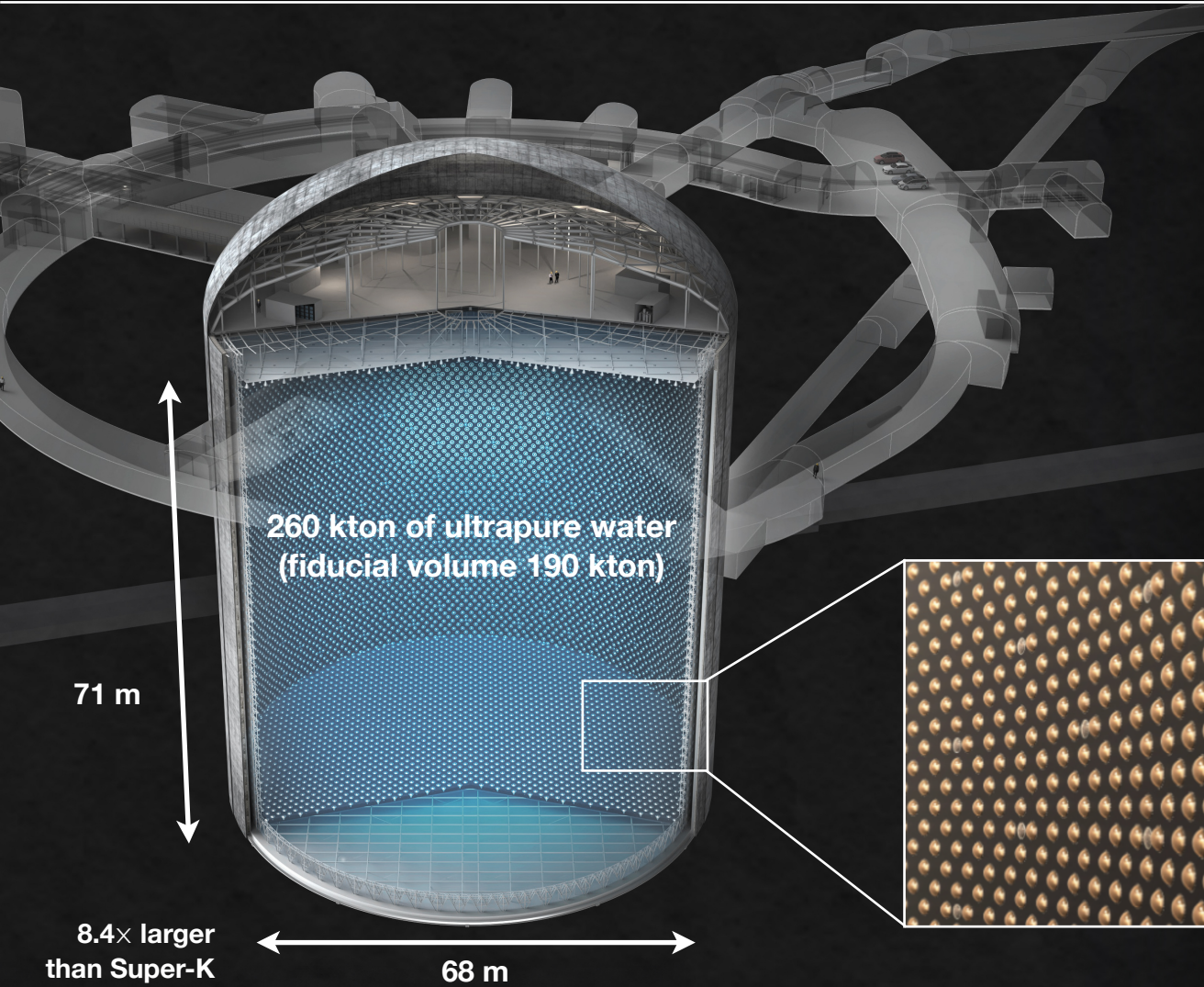




Hyper-Kamiokande

Data-taking
will start
in 2028!



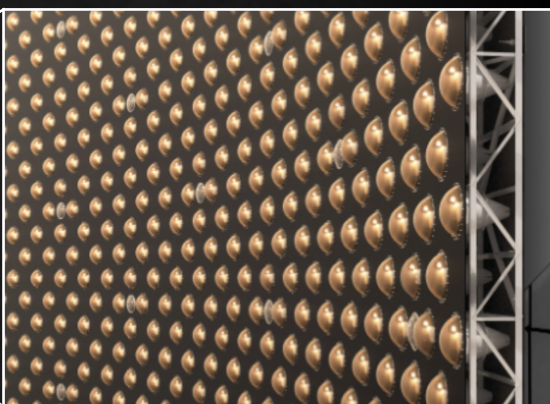
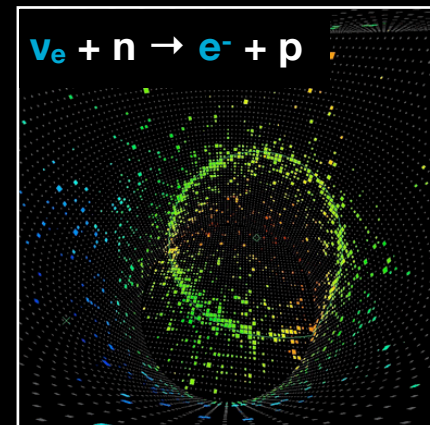
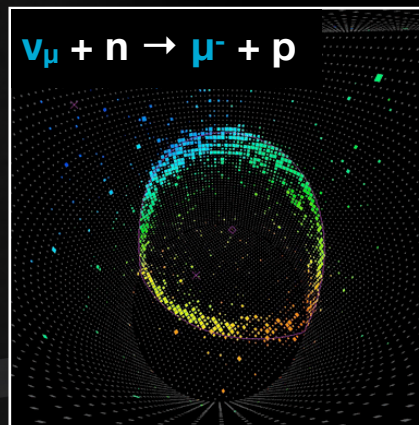
260 kton of ultrapure water
(fiducial volume 190 kton)

71 m

8.4× larger
than Super-K

68 m

Neutrino ID with Čerenkov rings



20k 50 cm PMTs
by Hamamatsu

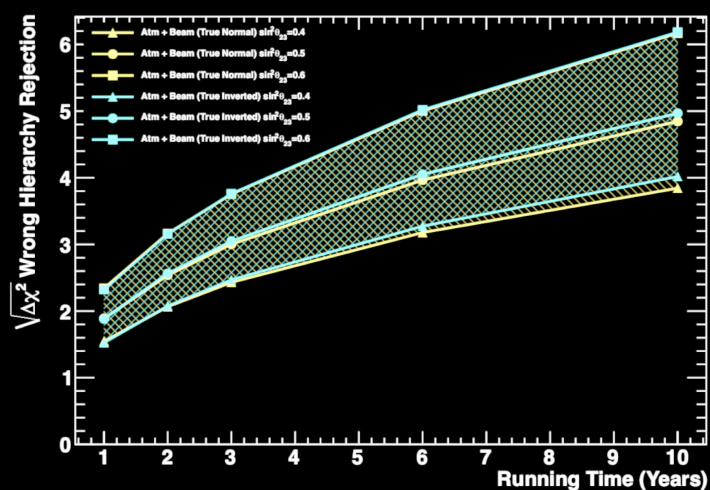
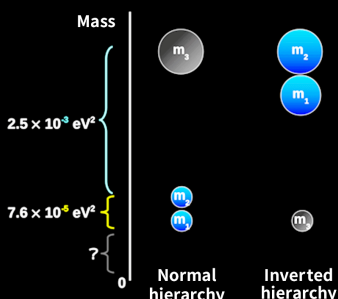


NEW!

800 multi-PMTs
developed by INFN

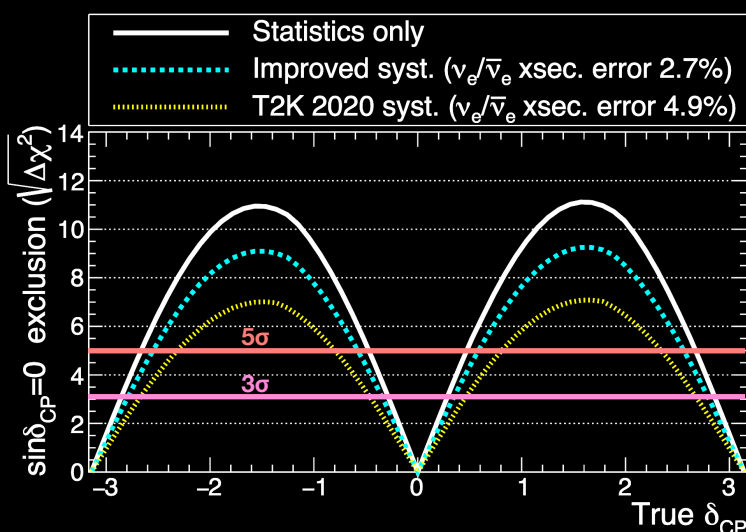
Atmospheric/solar neutrinos

Neutrino mass
hierarchy currently
unknown: is it
normal or inverted?

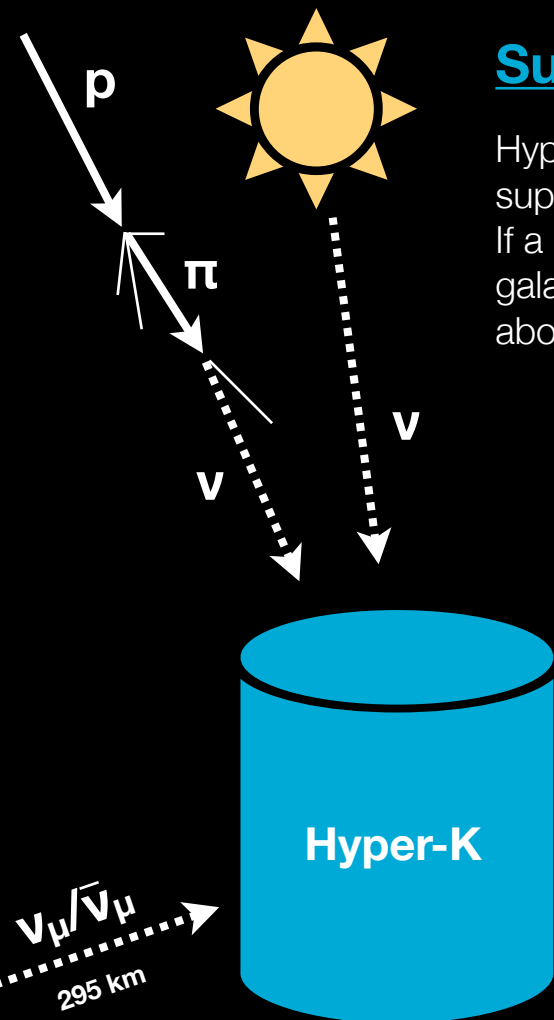


J-PARC accelerator in Tokai

Sensitivity
to neutrino
CP violation
after 10 years
of data taking



Beam neutrinos



Supernova neutrinos

Hyper-K will be sensitive to
supernova explosions within 2 Mpc.
If a supernova occurs inside our
galaxy (10 kpc) Hyper-K will detect
about 50,000 neutrinos



Hyper-K Rome

L. Ludovici
F. Ameli
F. Bellini
N. Casali
G. Cavoto
F. Pandolfi
F. Renga
M. Rescigno

Proton decay

Grand Unification
Theories (GUTs)
predict proton decay

