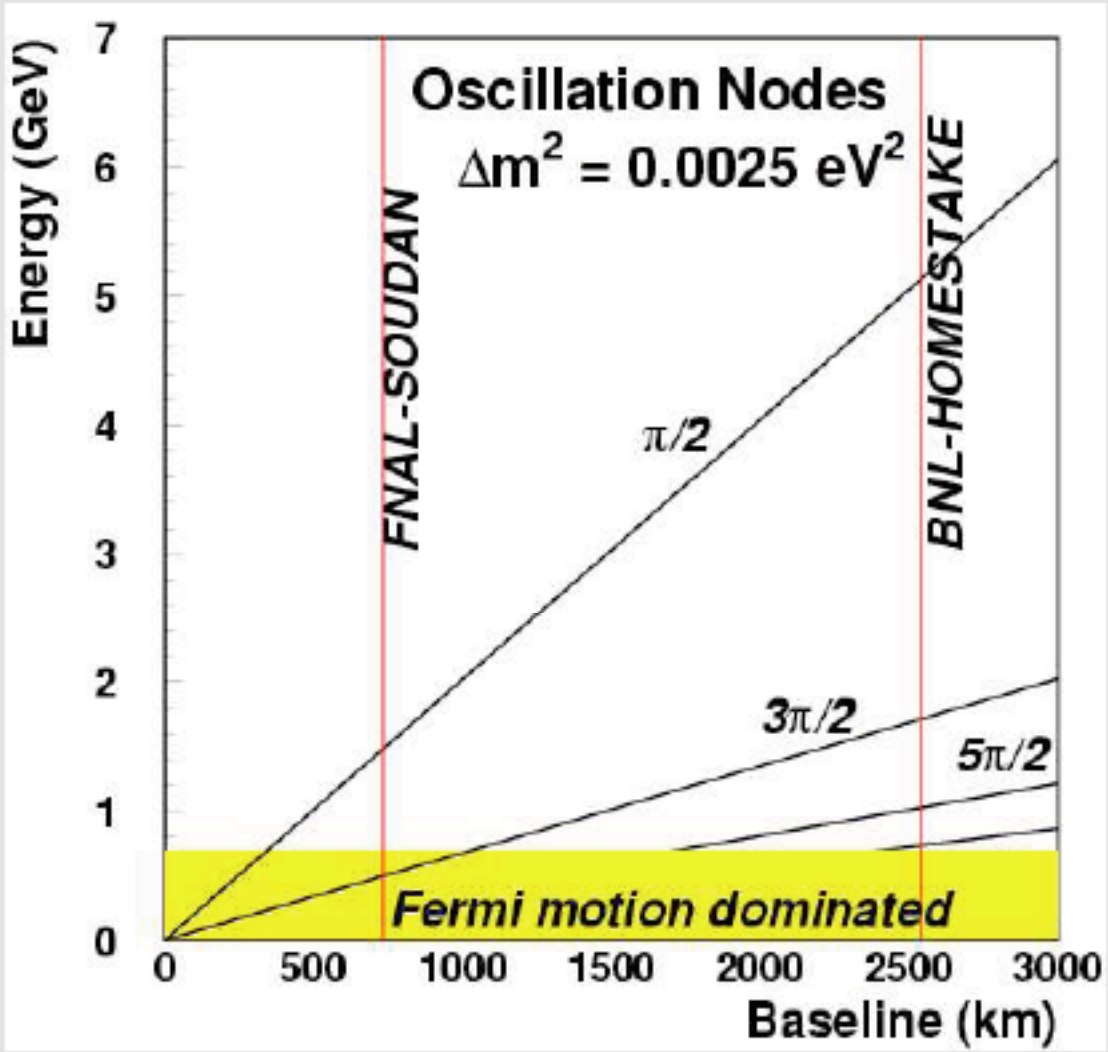
Why Very Long Baseline?

observe multiple nodes
in oscillation pattern

☞ less dependent
on flux normalization

neutrino travels larger
distance through earth

☞ larger matter effects



flux ~ L^{-2}: lower statistics
but: CP asymmetry ~ L

☞ sensitivity to δ_{CP} independent of distance!
better S:B

(Marciano hep-ph/0108181)