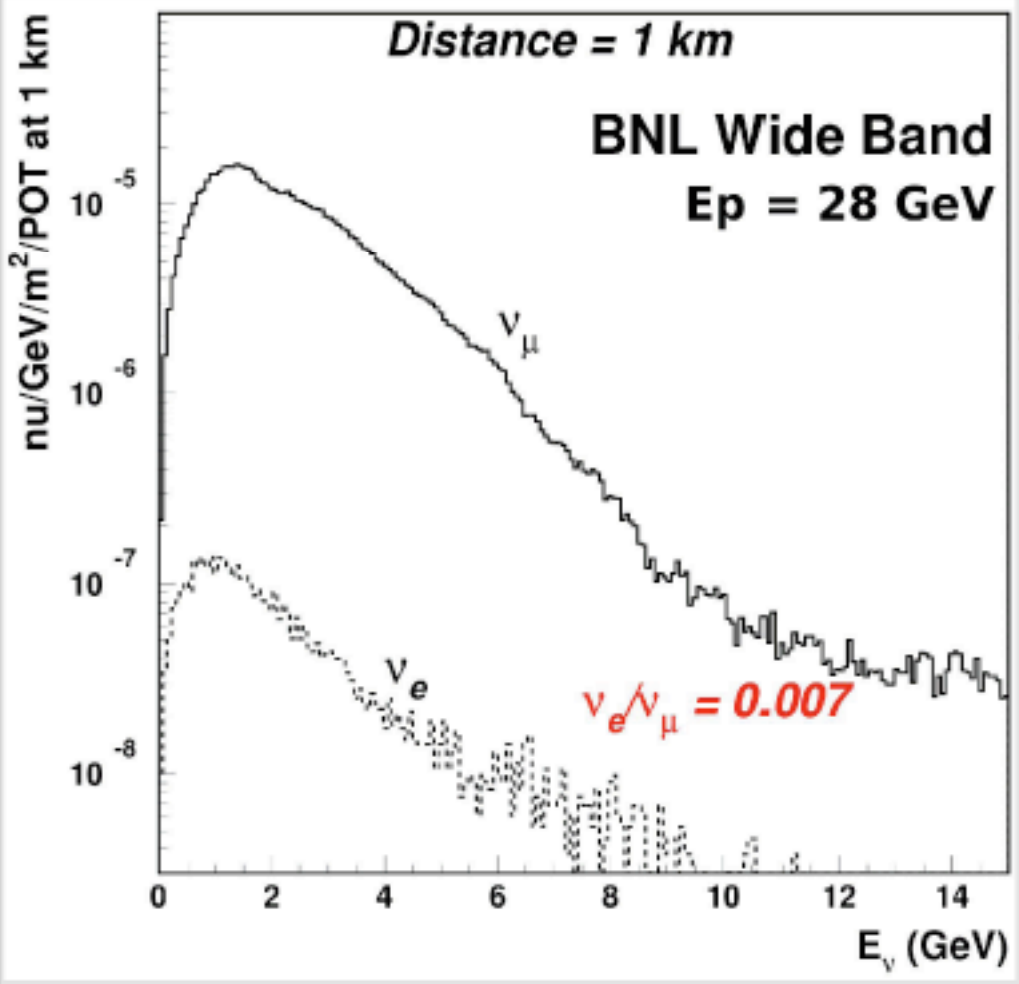
AGS 1MW proton beam

Upgrade AGS (28 GeV protons)

intensity: 7.10^{13} → 9.10^{13} ppp

rep. rate: 0.5Hz → 2.5Hz



1) ramp time: 0.5s → 0.2s
   repl. power supply, rf, ...

2) filling time: 0.6s → 1ms
   replace booster:
   exist. warm linac 200 MeV
   new SC linac 1 GeV

cost estimate: $273M
(excl. contingency)

takes 6 years to complete