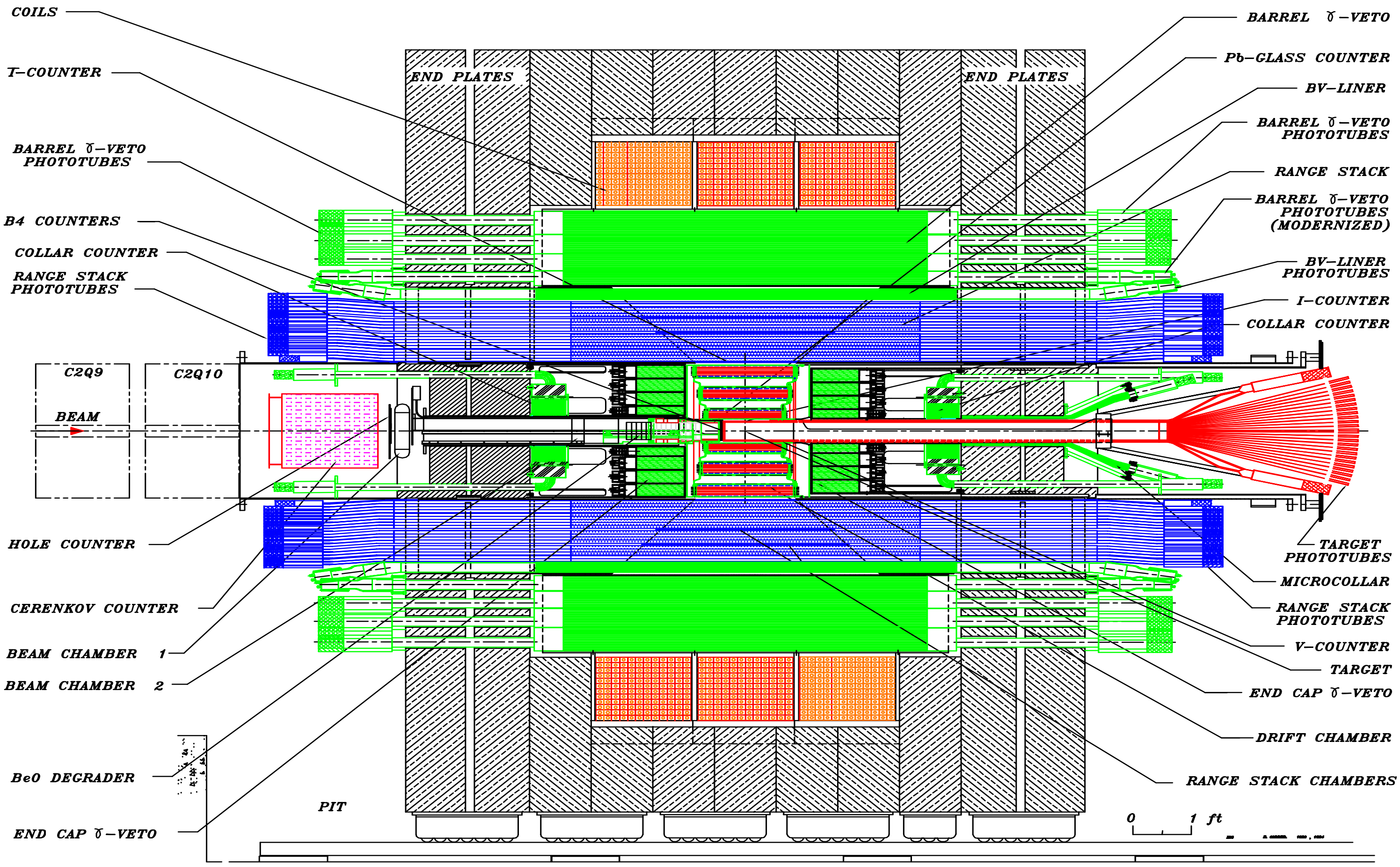
E949: $K^+ \to \pi^+ \nu \overline{\nu}$



Alberta/BNL/FNAL/Fukui/IHEP/INR/KEK
Kyoto/UNM/Osaka/TRIUMF/Yeshiva

Sensitivity Improvement compared to E787 (1995):

- Increased spill length ($\times 1.56$)
- Lower Momentum ($\times 1.38$)
- Increased efficiency (trigger,DAQ,analysis) ($\times 3.2$)
  - Increase acceptance below $K_{\pi 2}$ peak [$\times 2$]
  - Re-optimize analysis for higher rates [$\times 2$]
- Total gain of $\times 14$ (per hour of running)