

Spallation Neutron Source

- World's most powerful neutron science facility (x 10)
- BES User Facility: ~2000 guest scientists per year (by ~2012)
- Pulsed 1 GeV proton beam from Linac/Ring creates neutrons by spallation reaction with a mercury target – 20 to 30 neutrons per proton
- Design for eventual 24 instrument stations
- Partnership of 6 laboratories (ANL, LBNL, LANL, JLAB, BNL, ORNL) plus AECM (K-J) under direction of ORNL-SNS Project Office in Oak Ridge
- Project started CD/R&D in 1995, baselined in 1997, broke ground in 1999, completed May 2006

Level 0 Baseline Objectives

- 1 Mw proton beam on target – facility capability
- Completion by June 2006
- Total Project Cost = \$1,411.7M
 - ~\$450 M for “construction (conventional facilities and DB installation)
 - Remainder for technical systems – R&D, design, fab and commissioning