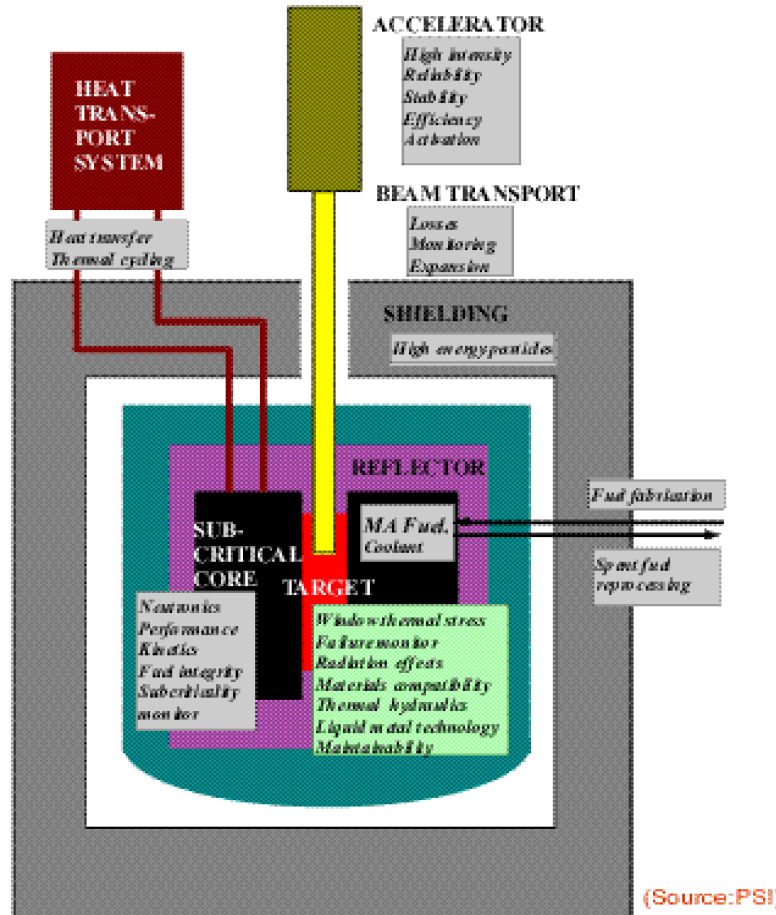


# ADS Research & Development, 1/8



Vast R & D activities in order to address these problems

# ADS Research & Development, 2/8

- Basic underlying physics checked at zero power
  - Spallation process and neutron yields with proton beam in a wide range of energies
  - Fission rates and main reactor physics features (FEAT sub-critical assembly with  $k \approx 0.9$  has demonstrated energy gain in agreement with calculations)
  - Transmutation rates for LLFP (TARC experiment: LLFP elimination by “adiabatic resonance crossing” demonstrated for  $^{129}\text{I}$  and  $^{99}\text{Tc}$ )
  - Most key reactions fully tested at low power level
  - Comprehensive programme of neutron induced cross-section measurements started (n\_TOF Project)