

Neutron Detectors WG

Priority Physics (at 10, 50, 100 kW)

Reactions and decay studies
Invariant/Missing Mass near or past the neutron dripline (high power)
Prefragmentation dynamics (low power)
Isospin dependence Reactions/Equation of State (low intensity)
Gamow-Teller resonances
Beta-delayed neutron spectroscopy
r-process

Priority Beams (at 10, 50, 100 kW)

Beginning - ^{48}Ca and ^{82}Se
Eventually ^{76}Ge and ^{86}Kr

^{238}U , ^{82}Se , ^{48}Ca beams for decay and direct reaction studies.

Priority (Planned) Equipment (at 10, 50, 100 kW)

MoNA/LISA + Sweeper + S800 (day 1)
Segmented target
Need for position/current monitoring devices
Support for HRS
LEND (day 1), VANDLE (day 1)
New high-resolution neutron spectrometer for decay and direct reaction measurements. Capitalize on emerging neutron detector technologies.

Beam property and DAQ requirements?

Common DDAS protocol/format including timestamps and perhaps dynamic merging
Online ROOT converter