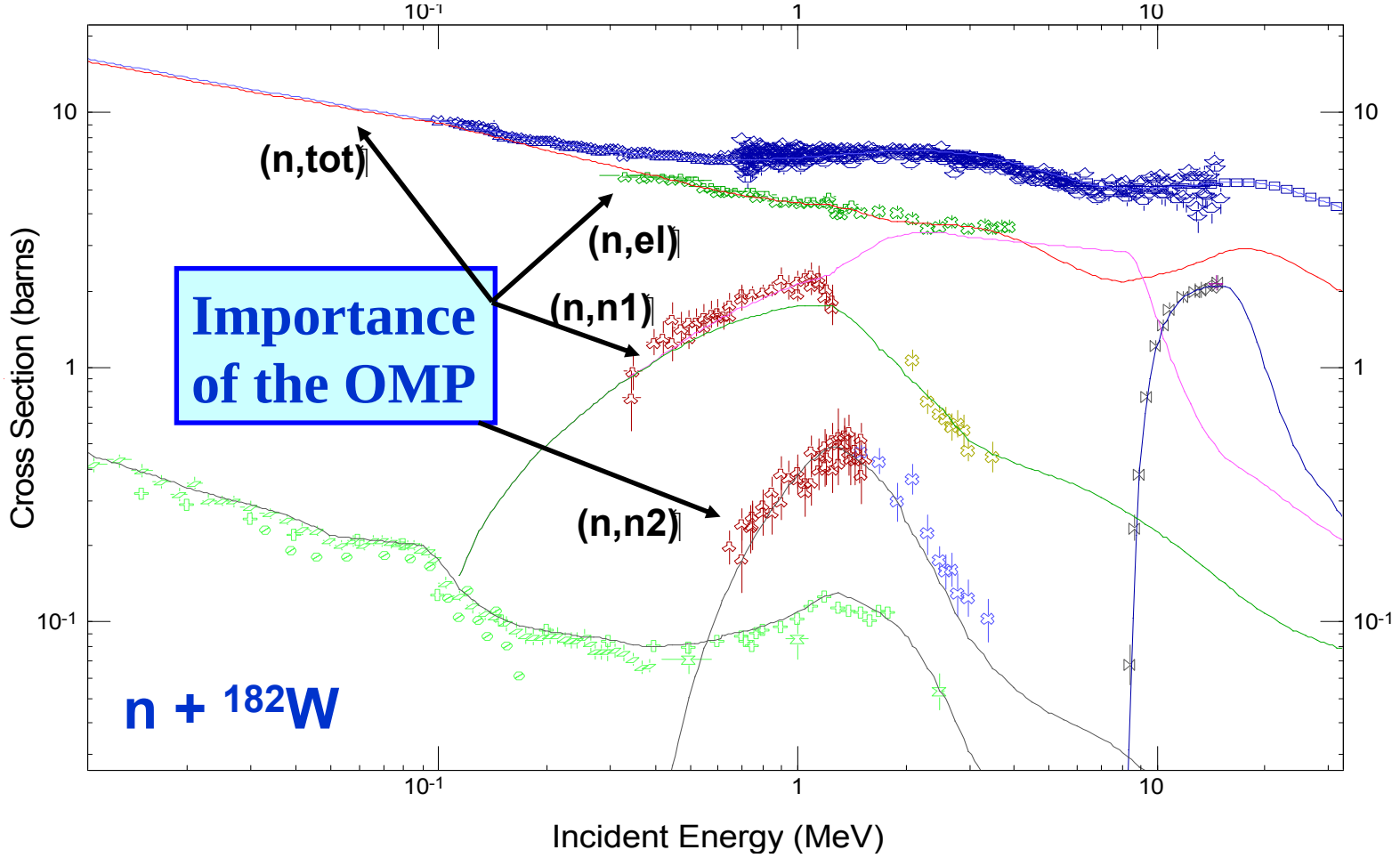
NUCLEAR REACTION CALCULATIONS

ENDF files available @ http://www-nds.iaea.org/wolfram/temp

EMPIRE nuclear reaction code, W-180, 182, 183, 184, 186
Dispersive coupled-channel OMP (Capote, Soukhovitskii *et al*, RIPL-3 1488)
EMPIRE specific NLD, MLO gamma-ray strength functions
PEq (exciton model PCROSS) + DWBA inelastic scattering up to ~ 7 MeV

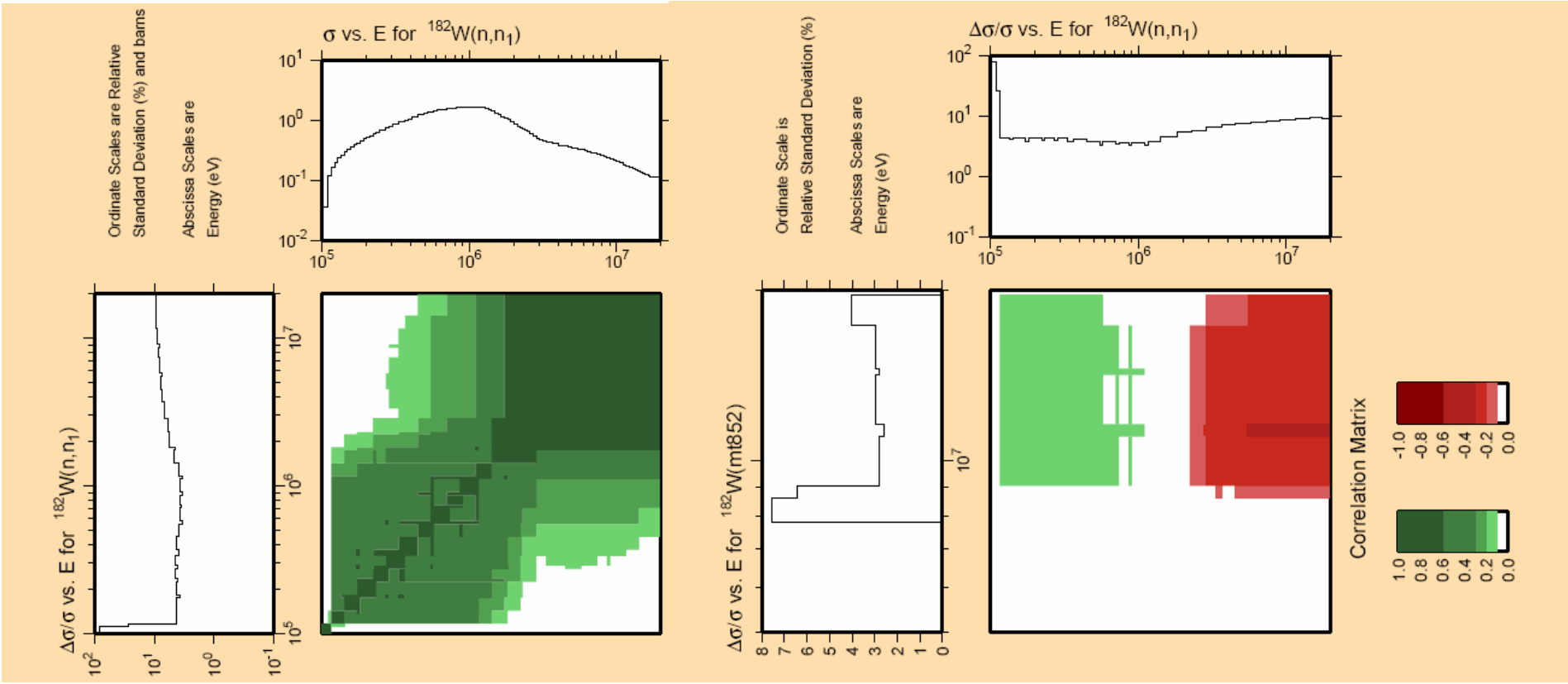


COVARIANCE INFORMATION

Consistent covariance (FILE 32,33) and the evaluation (FILE 2,3)

RR - retroactive method by L. Leal

Fast neutron range: EMPIRE/MC (model) + GANDR (exp. data)

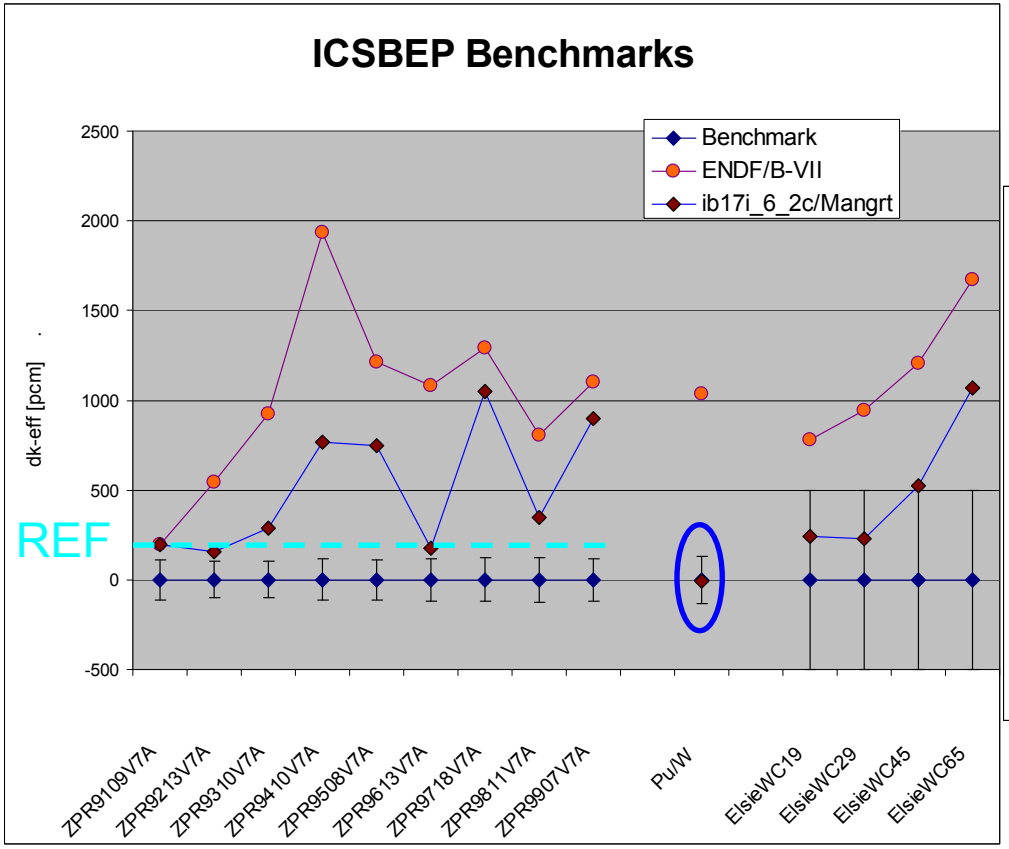


(n,n1)

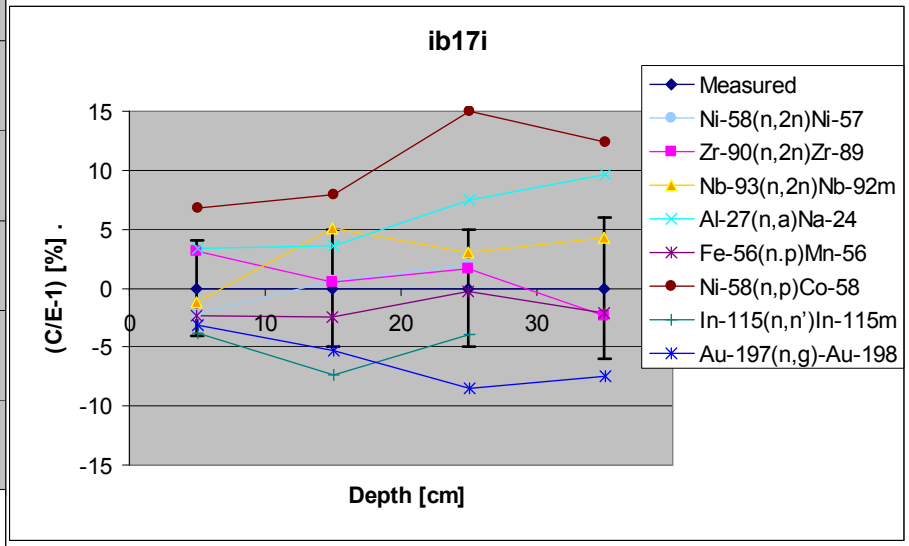
~6% @ 1 MeV

(n,2n) vs (n,n1)

Tested on fusion & fast neutron benchmarks



FNG benchmark, tungsten block
Activation measurements @ 14 MeV



No tungsten, reference case