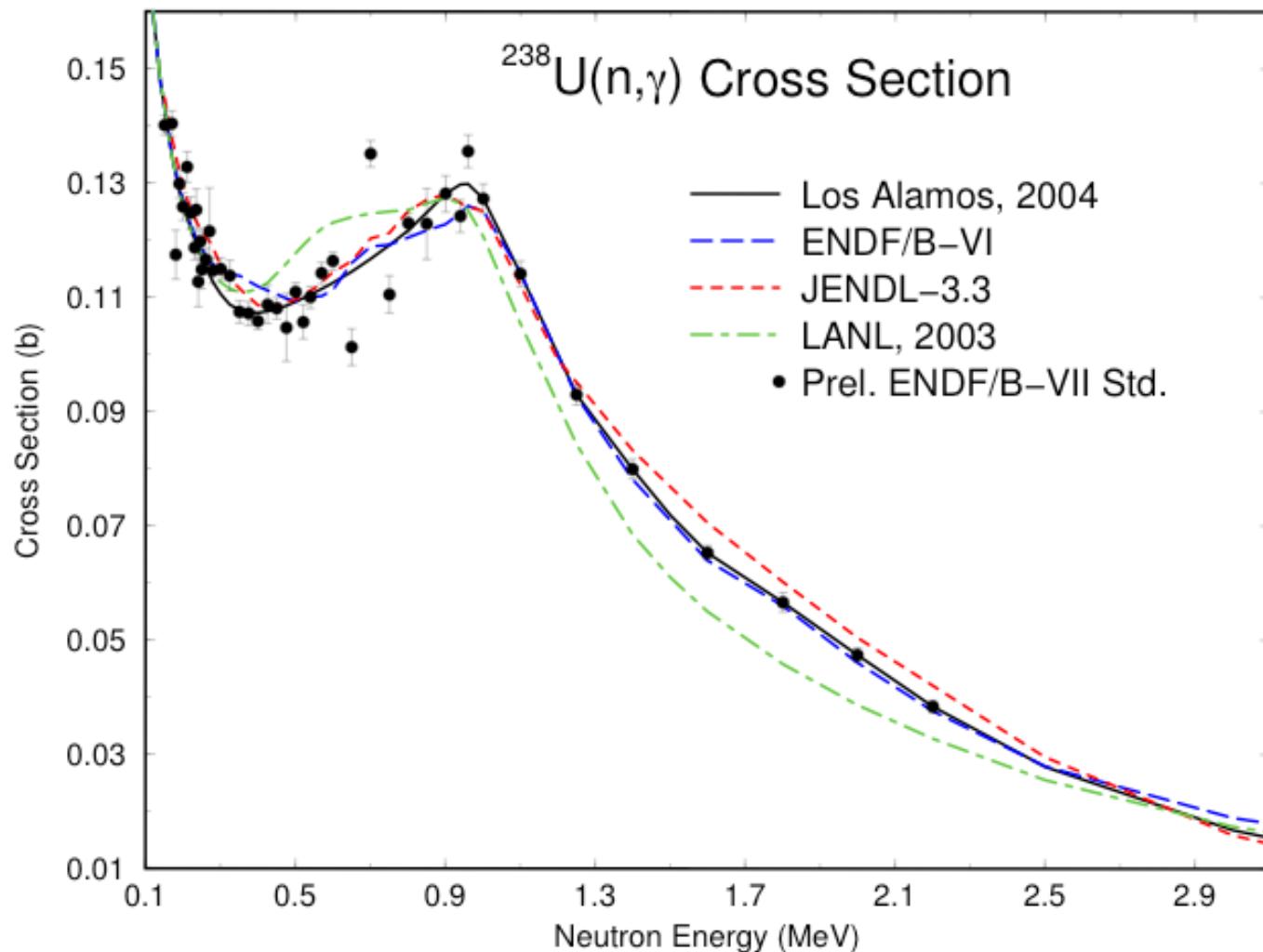


Update on LANL Uranium Evaluations

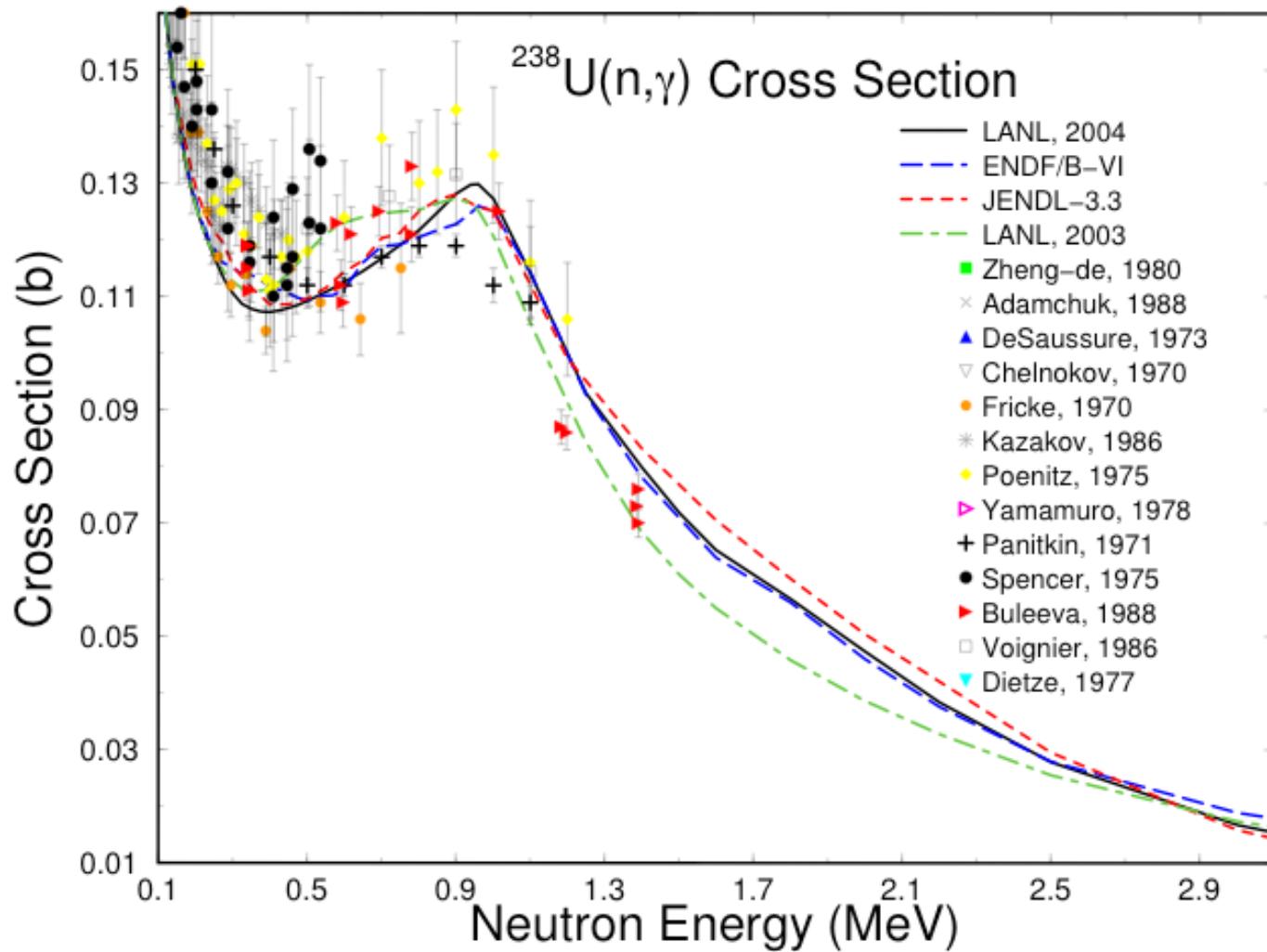
M.B.Chadwick

T-16, Nuclear Physics Group
Los Alamos National Laboratory

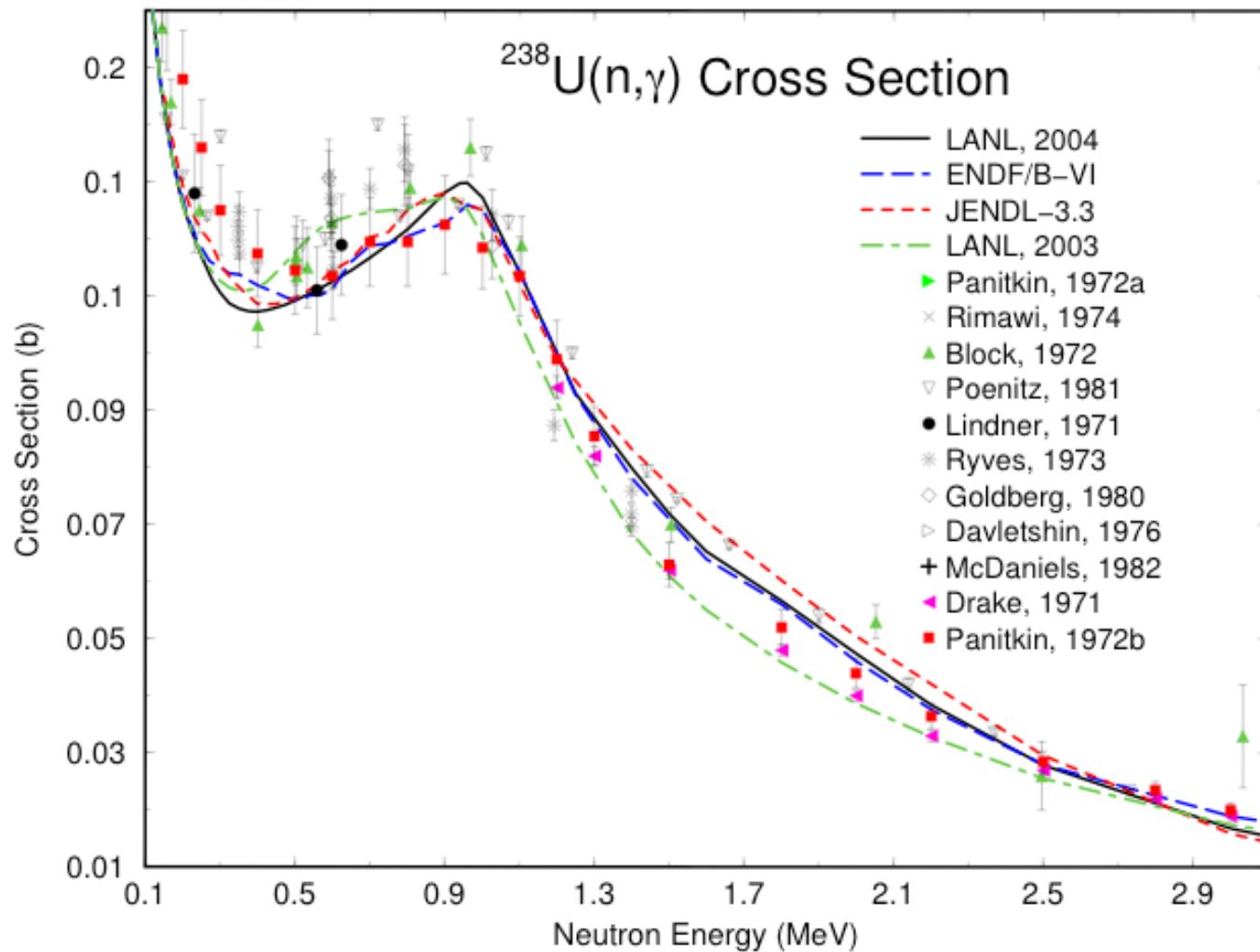
$^{238}\text{U}(n,\gamma)$ cross section with different exp. data



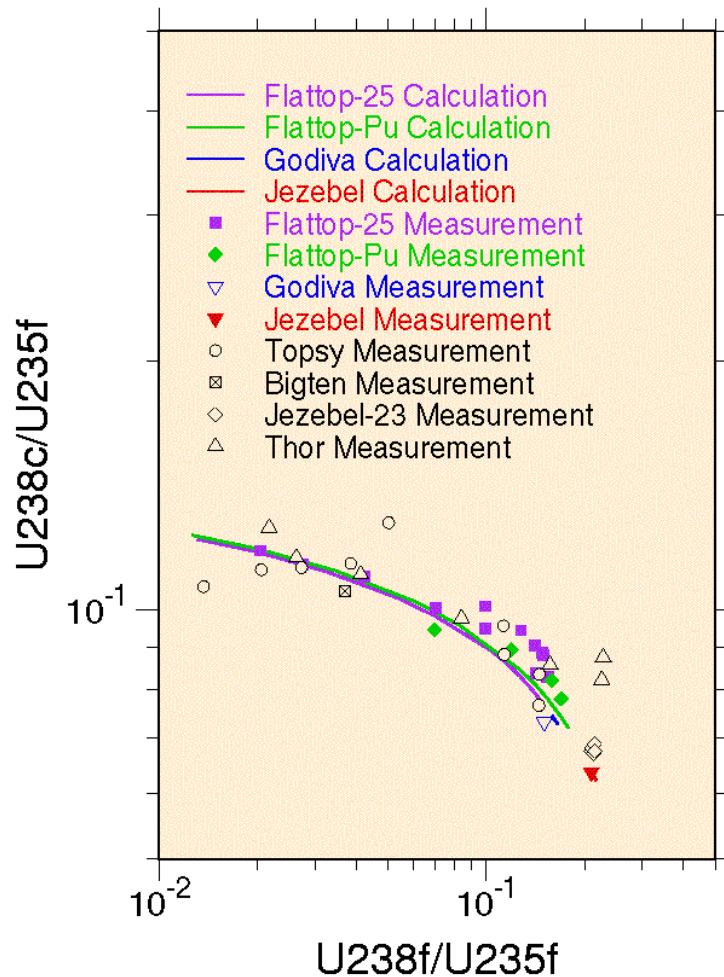
$^{238}\text{U}(n,\gamma)$ cross section with Carlson's preliminary standard results



$^{238}\text{U}(\text{n},\gamma)$ cross section with experimental data

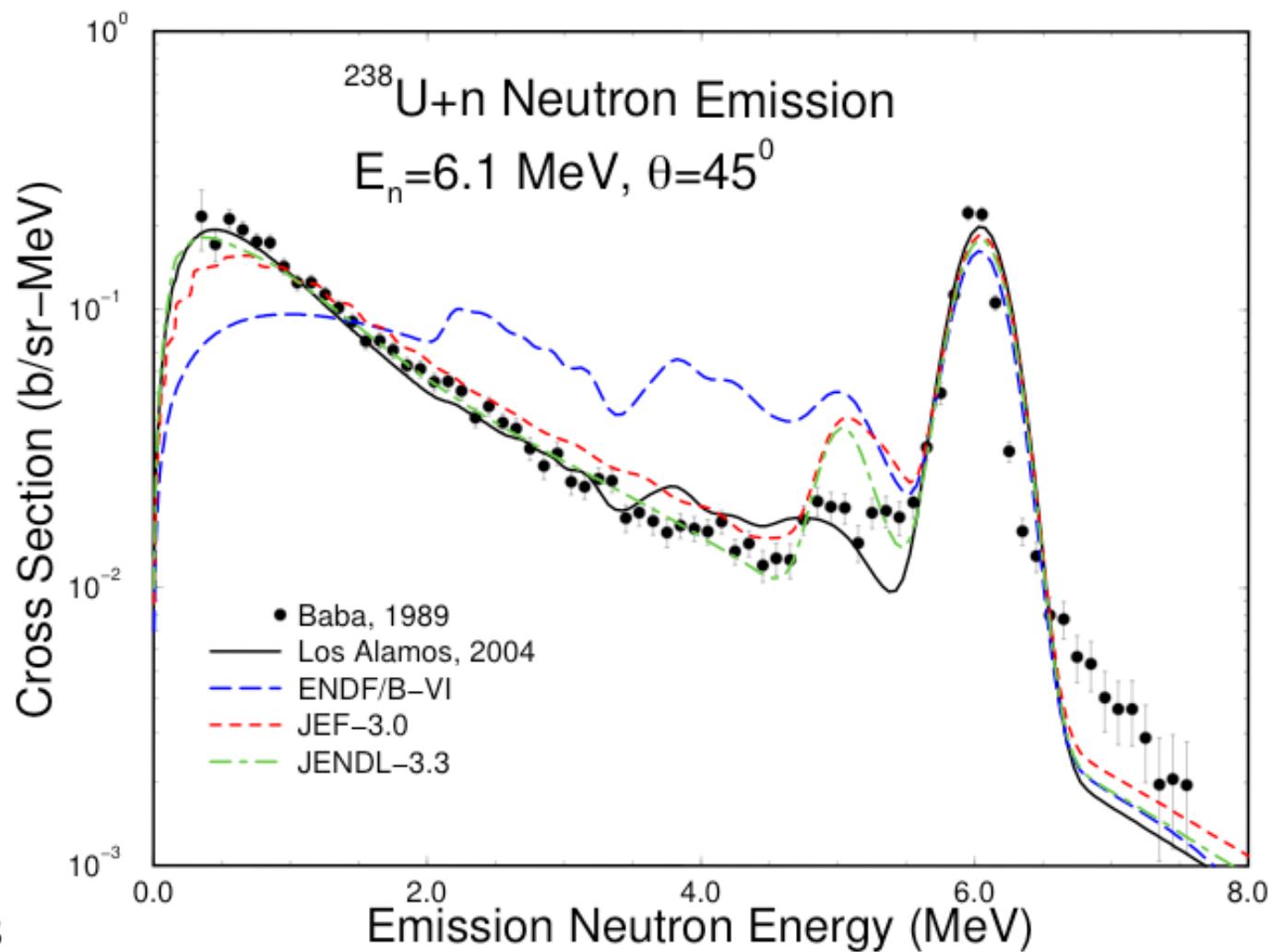


Integral validation of $^{238}\text{U}(n,g)$ cross section; Measurements of rates inside critical assemblies

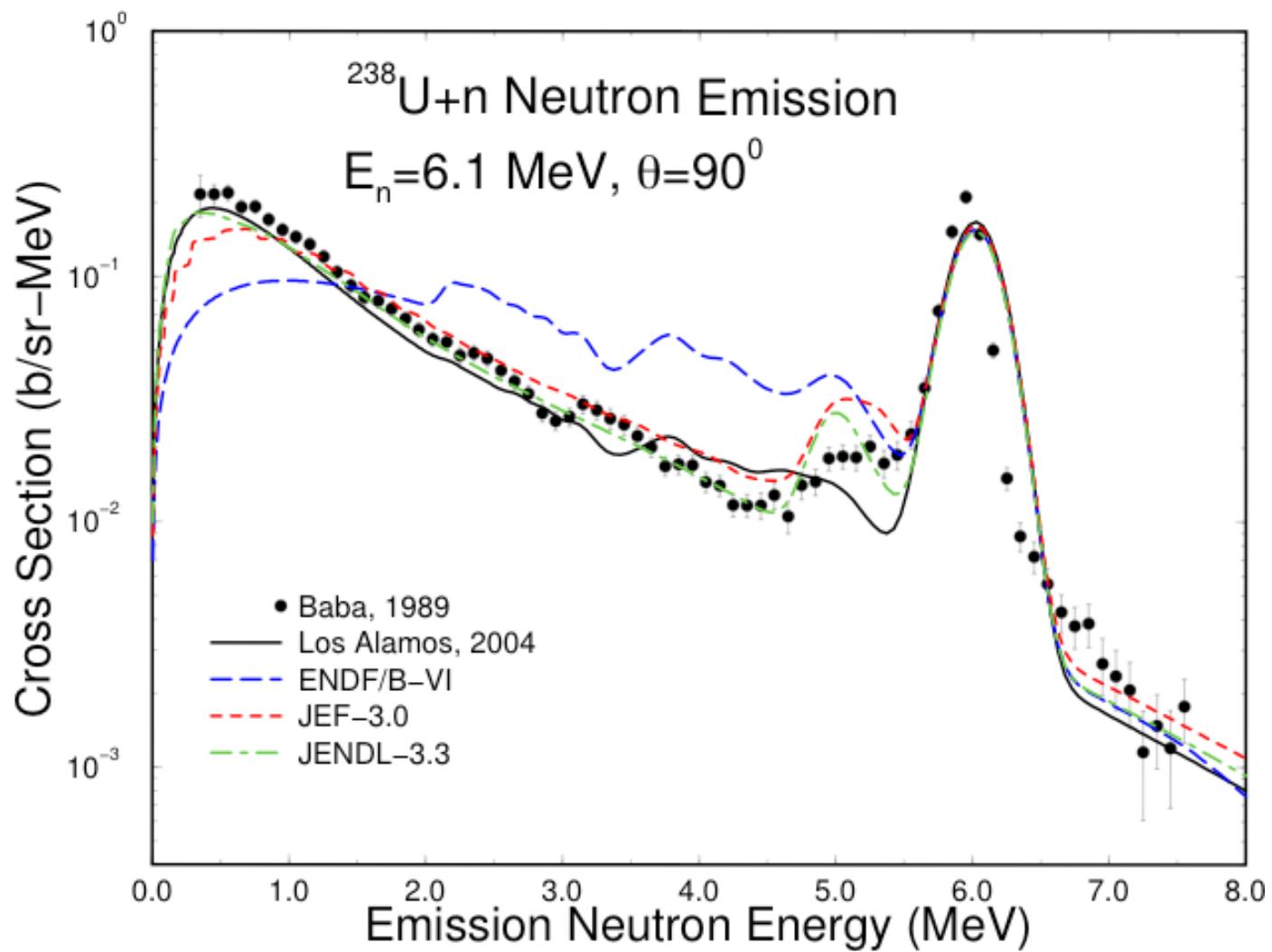


UNCLASSIFIED

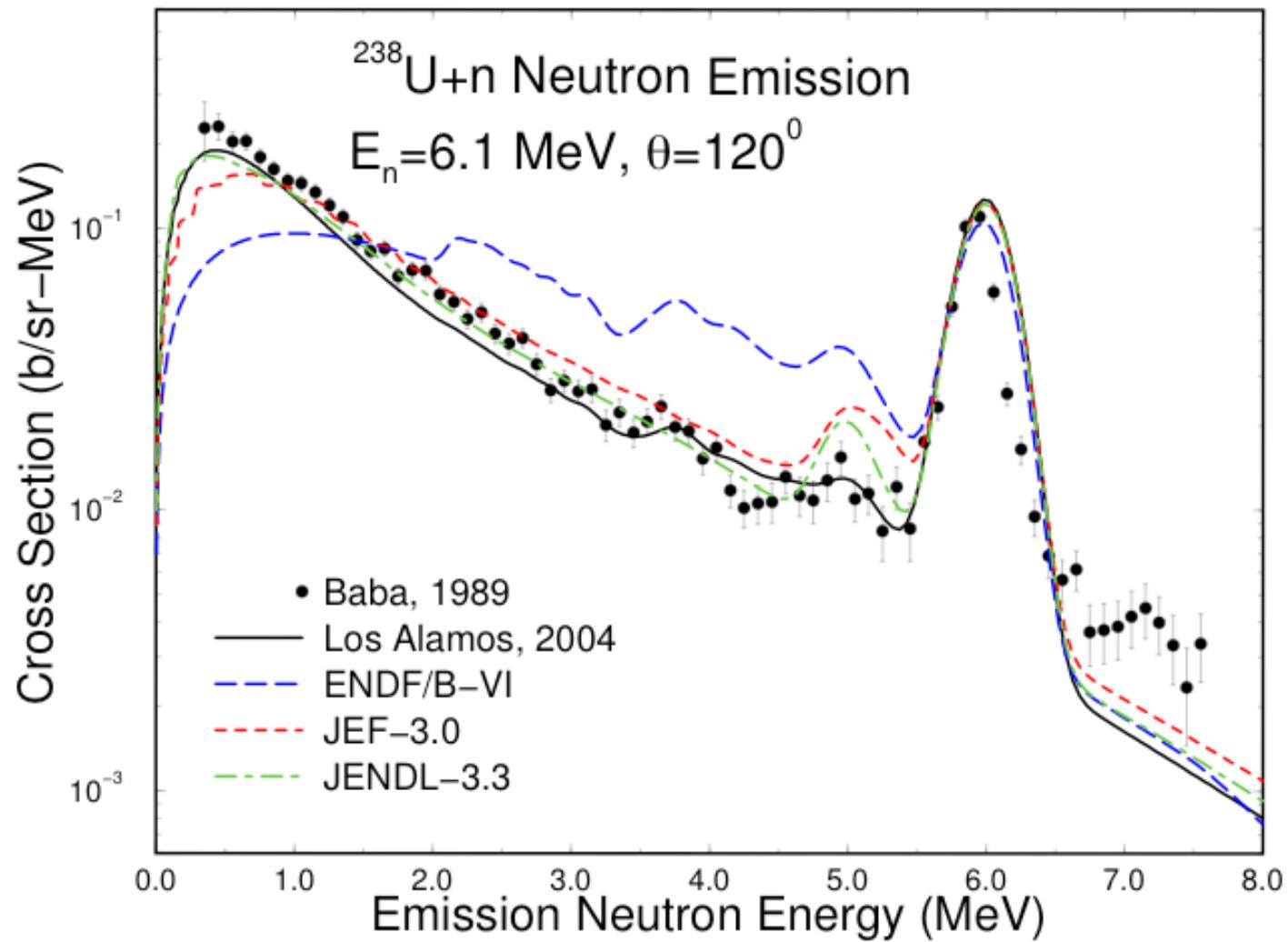
Double-differential neutron spectra (1/10)



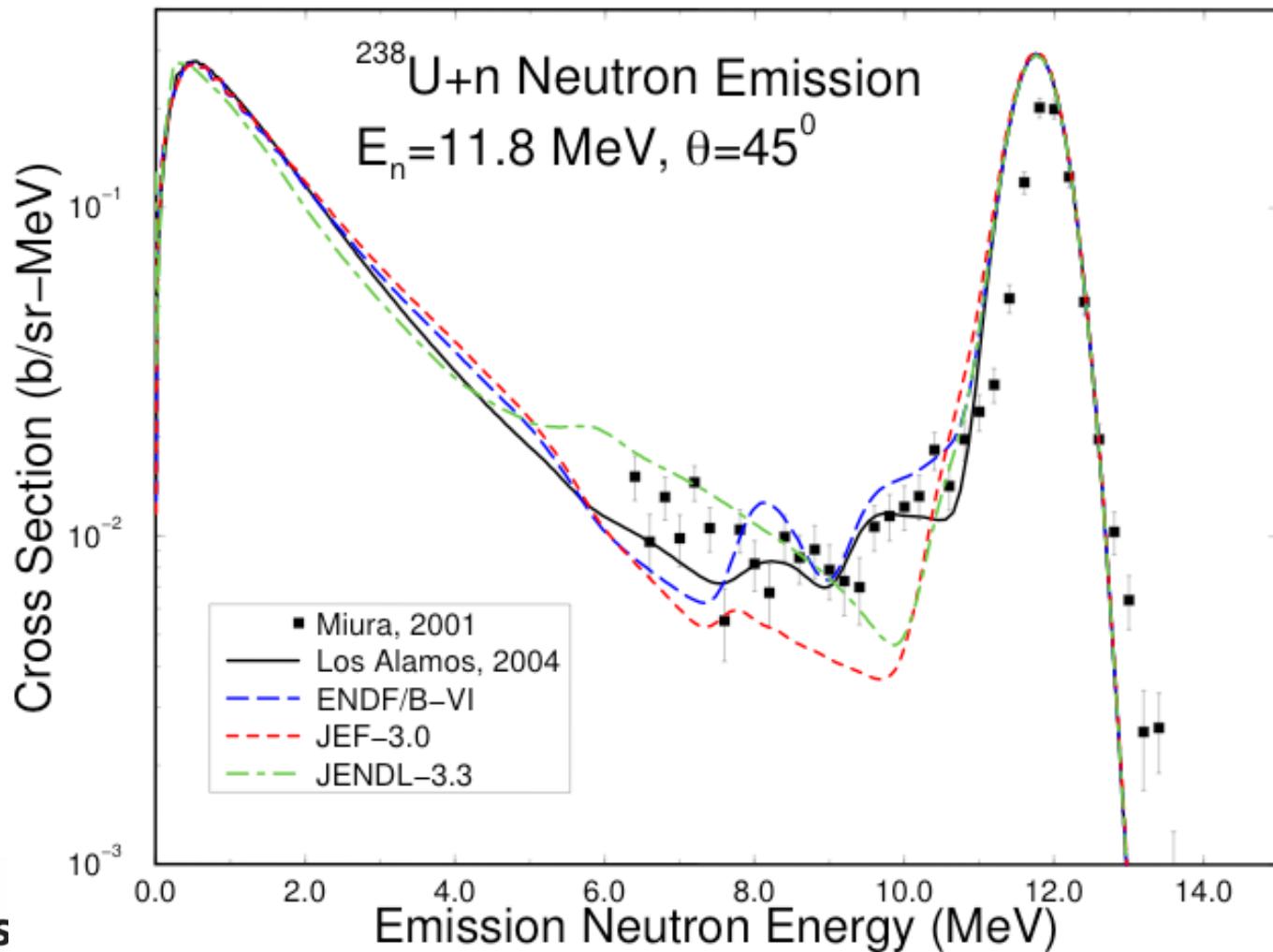
Double-differential neutron spectra (2/10)



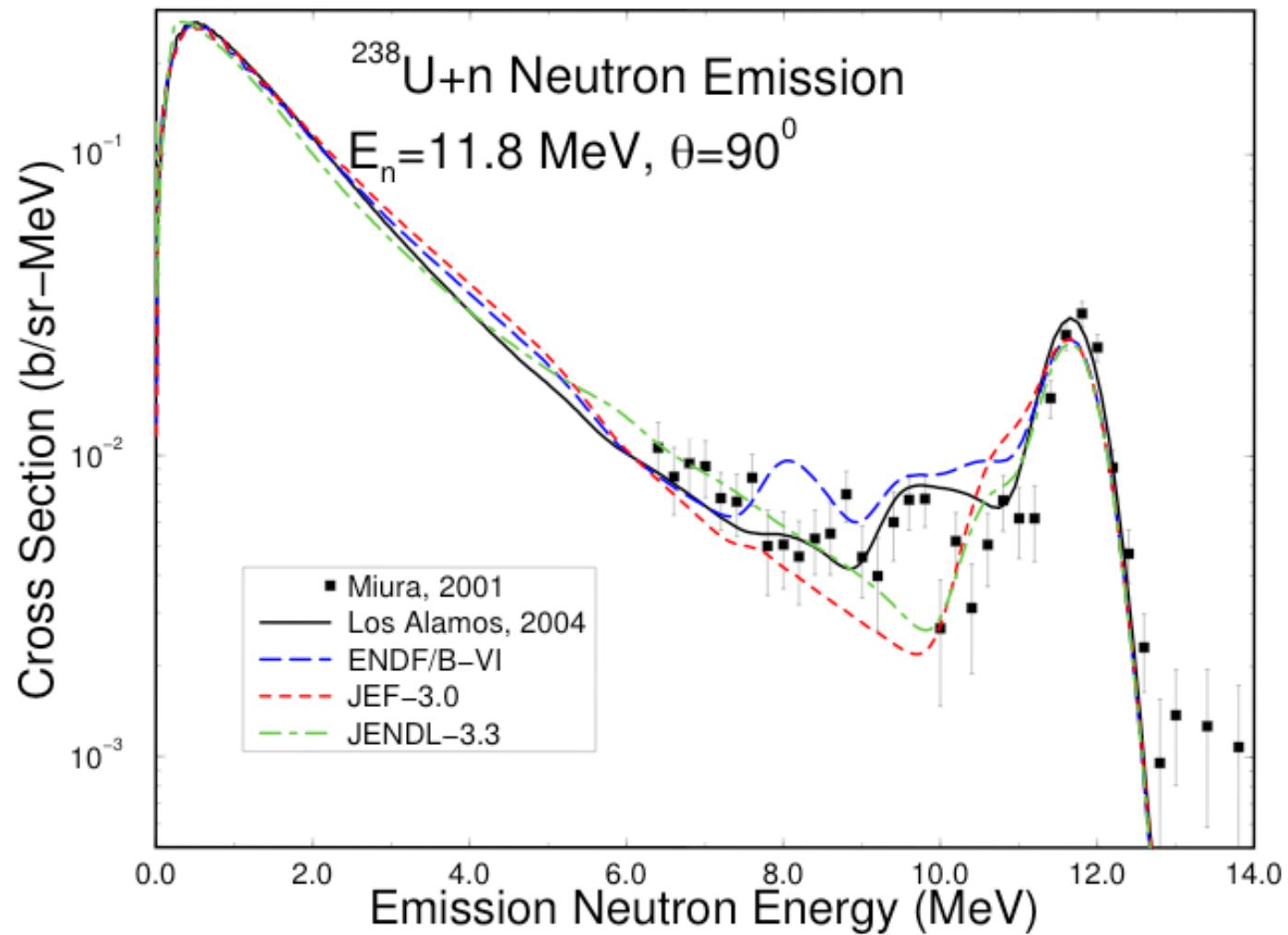
Double-differential neutron spectra (3/10)



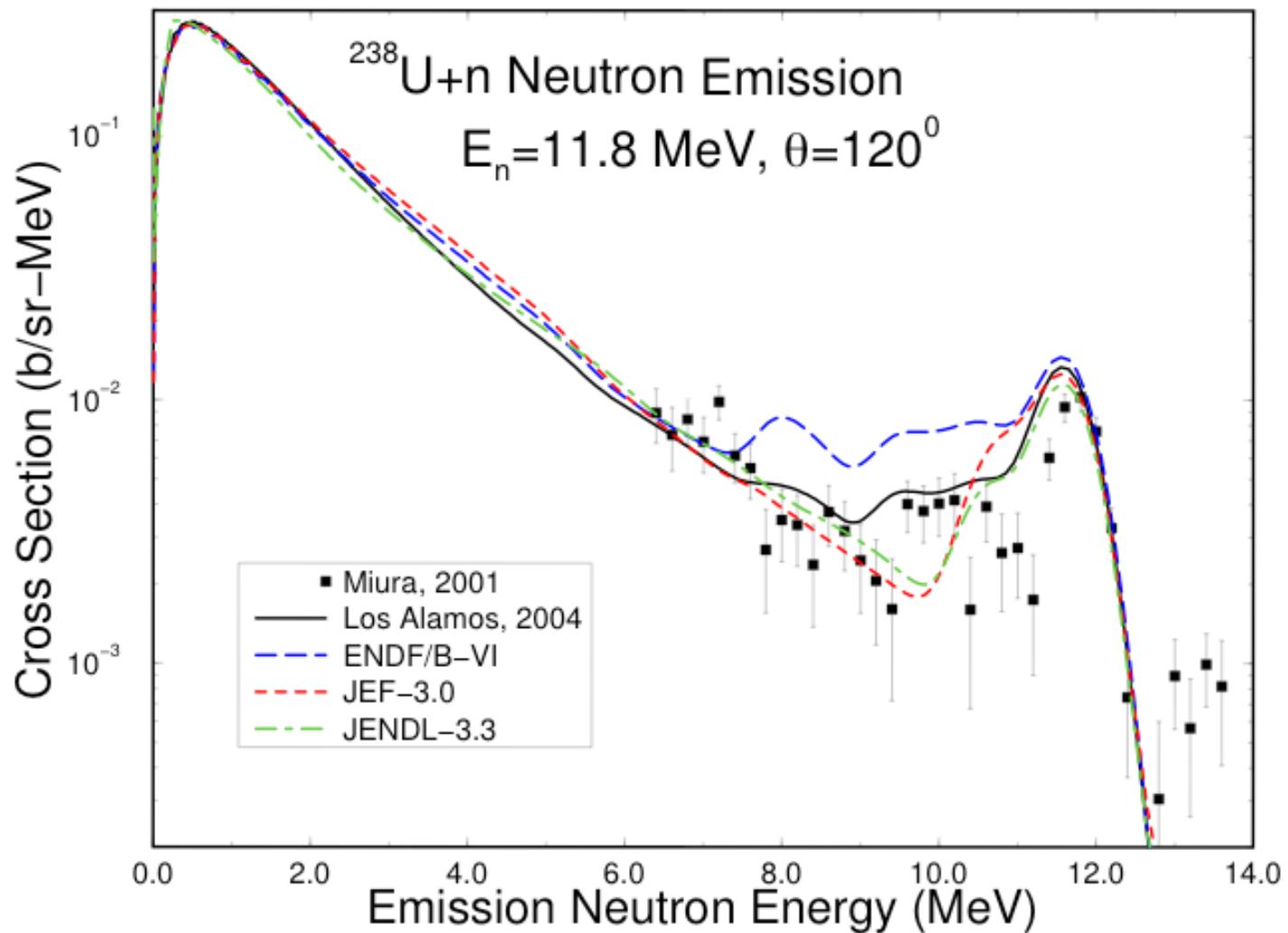
Double-differential neutron spectra (4/10)



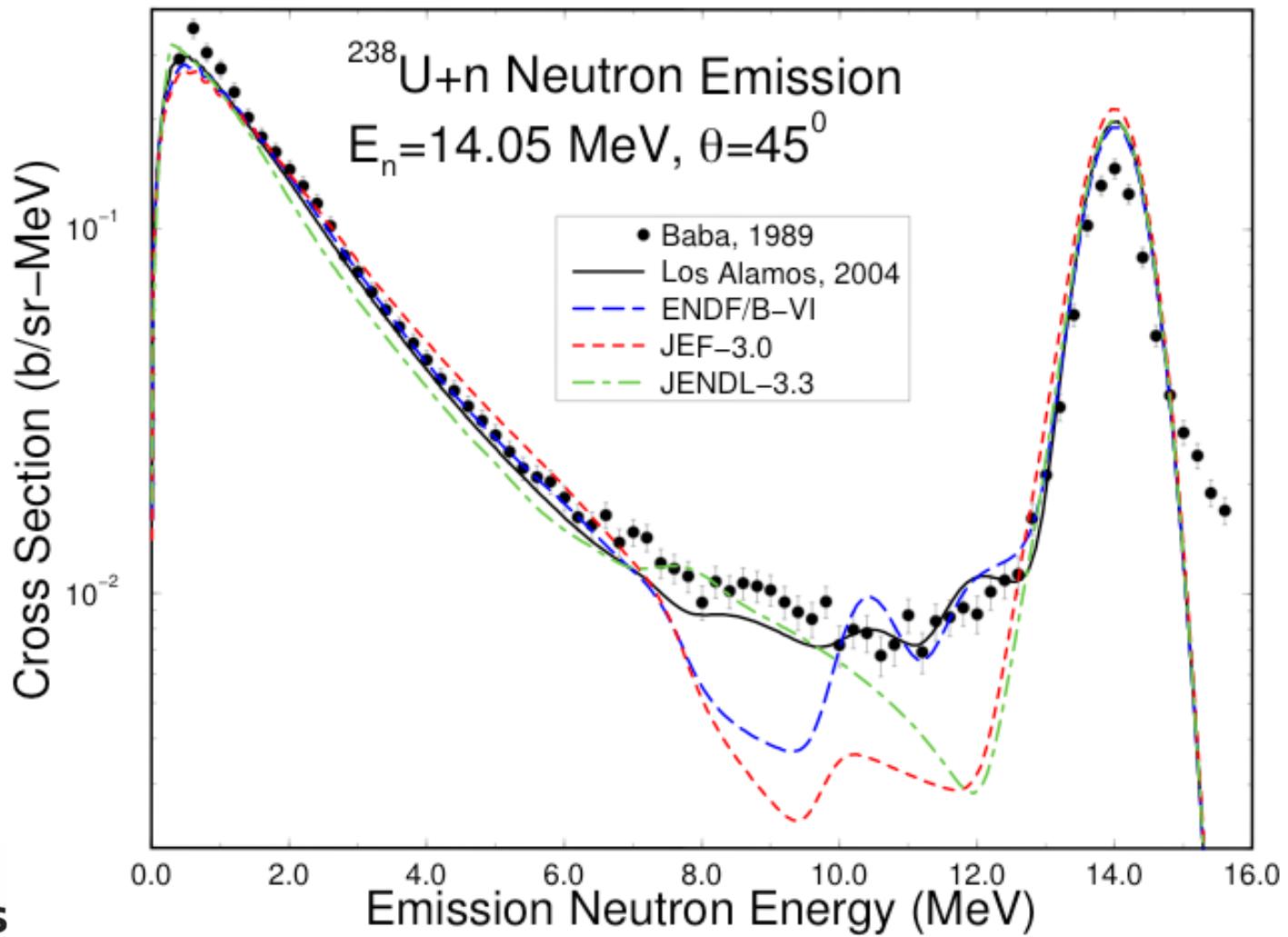
Double-differential neutron spectra (5/10)



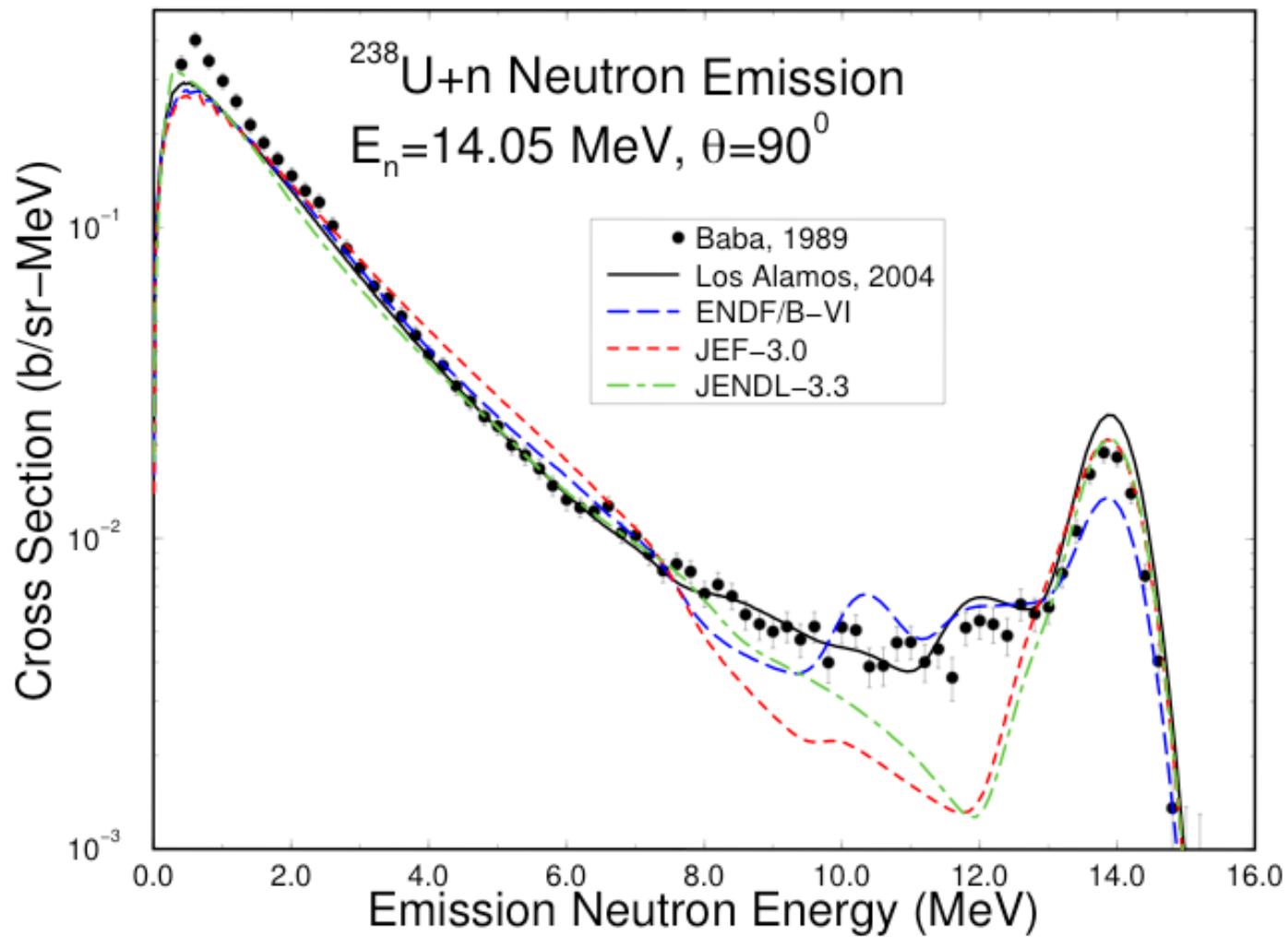
Double-differential neutron spectra (6/10)



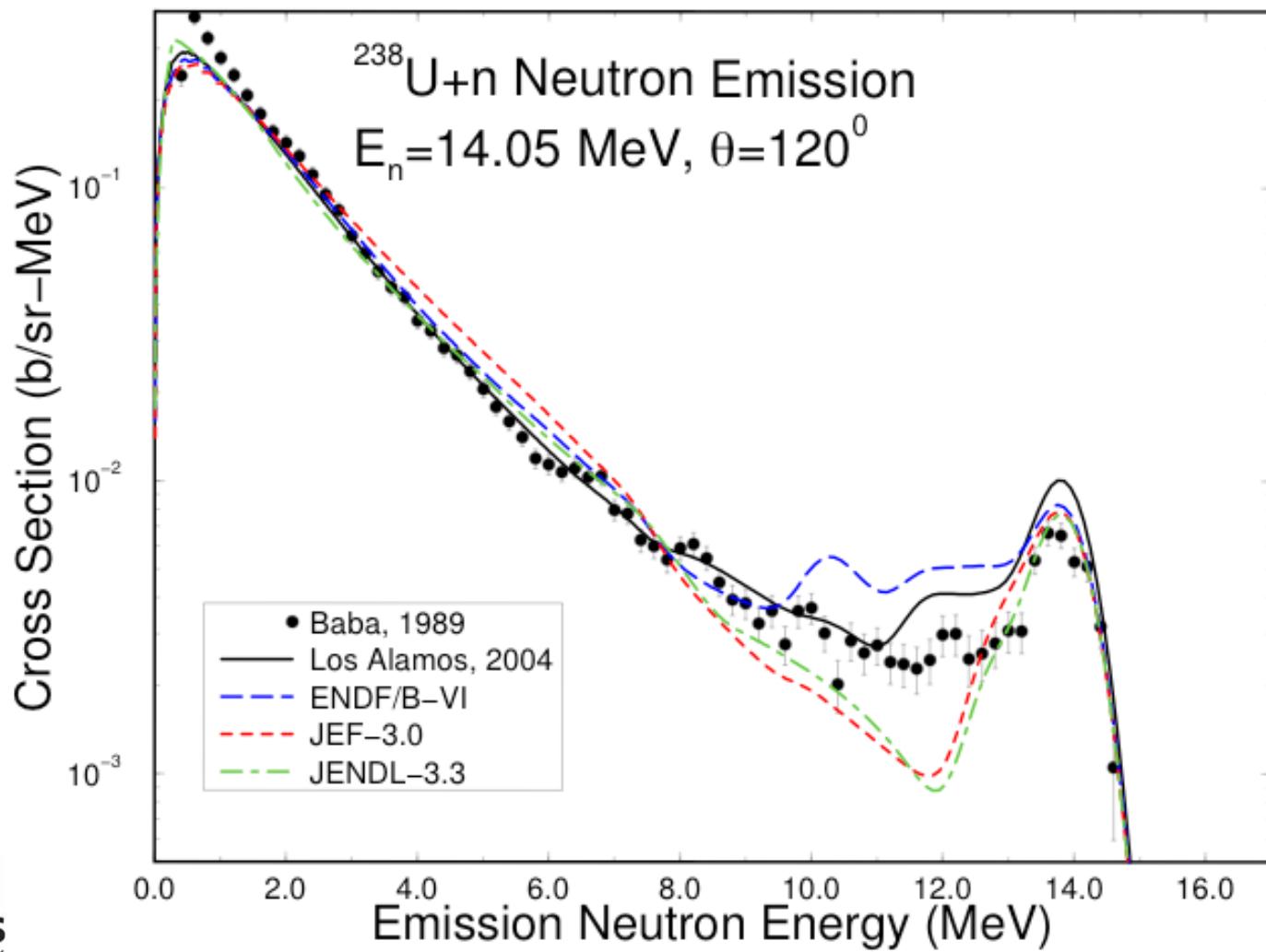
Double-differential neutron spectra (7/10)



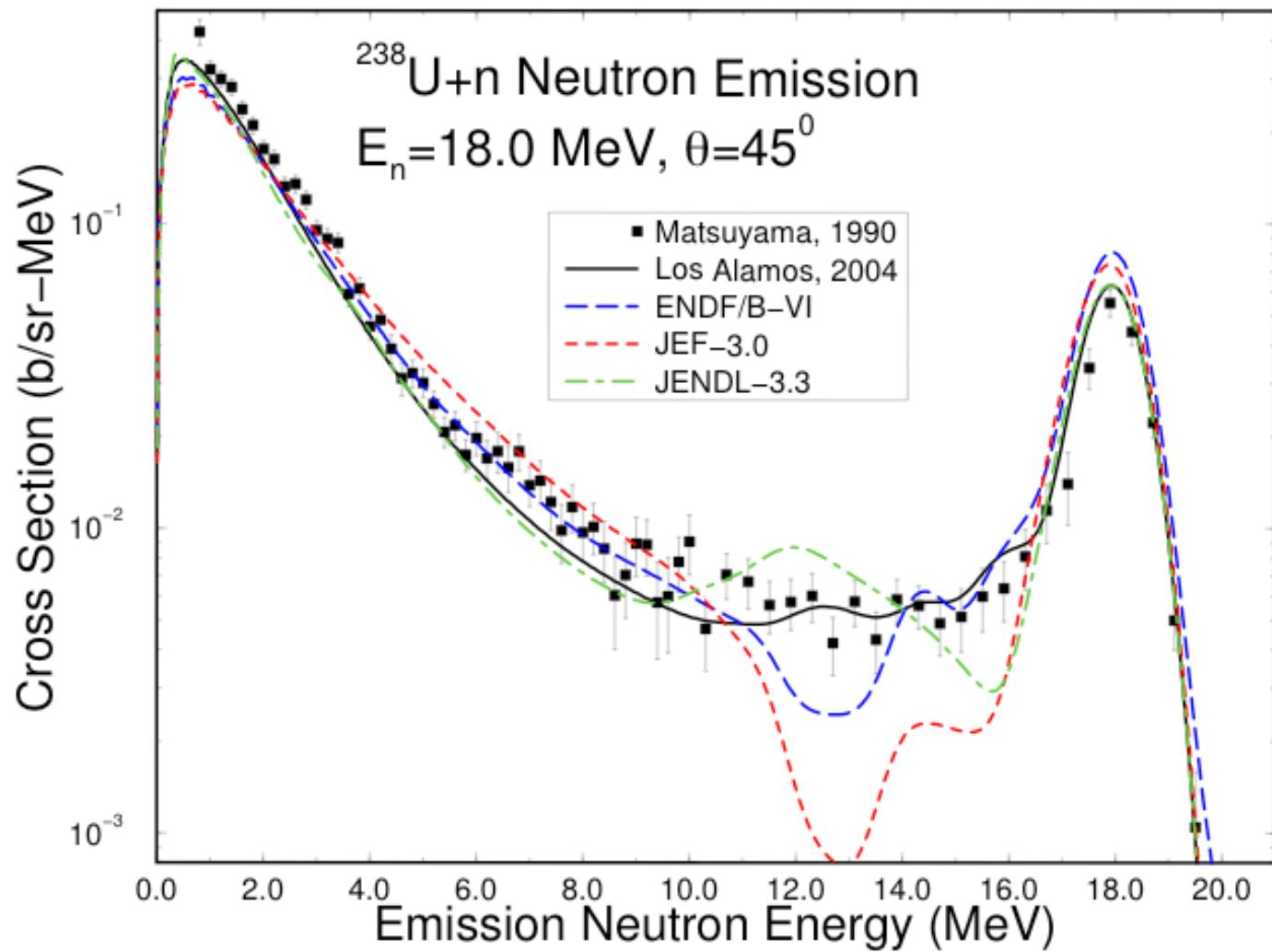
Double-differential neutron spectra (8/10)



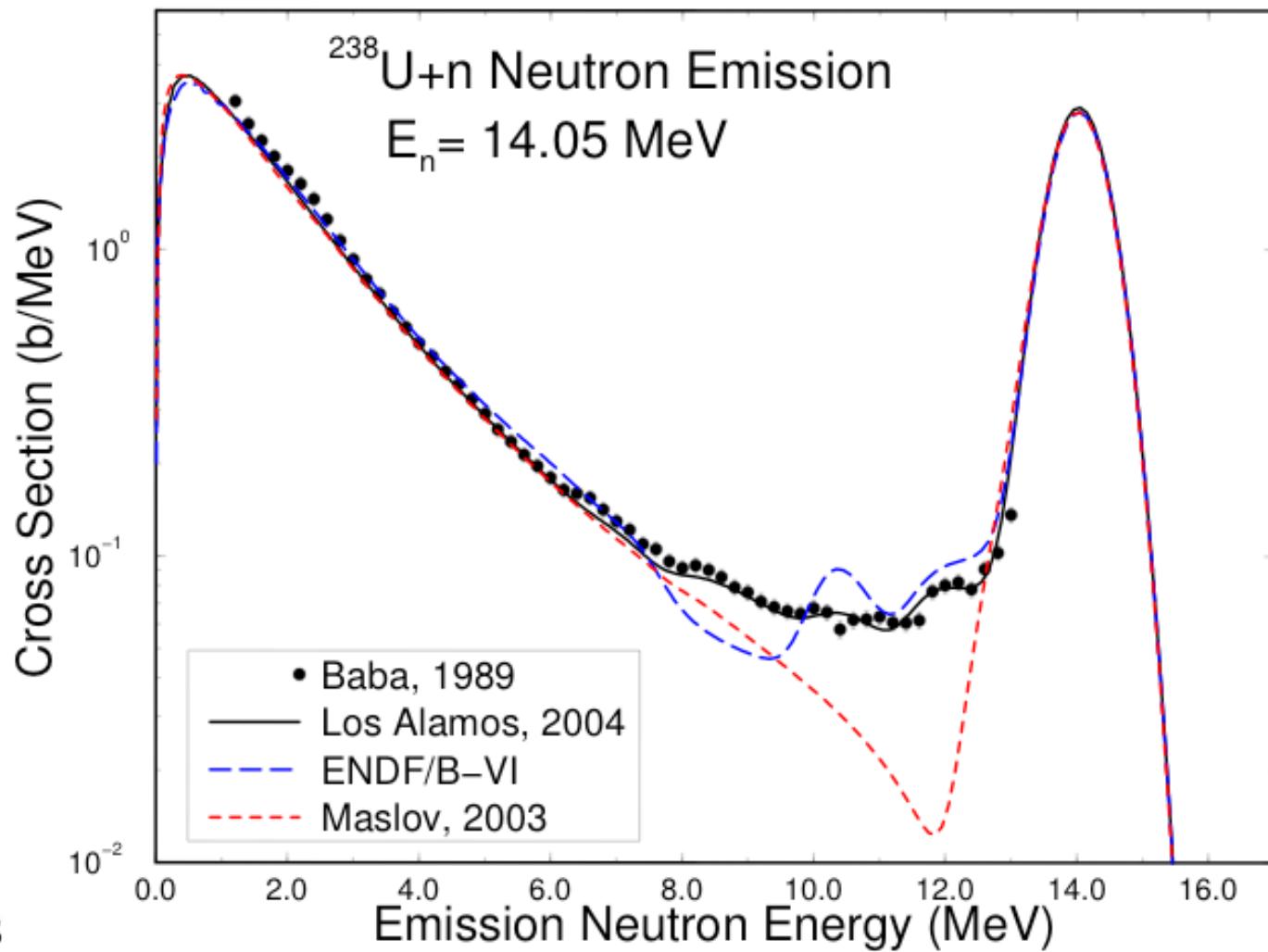
Double-differential neutron spectra (9/10)



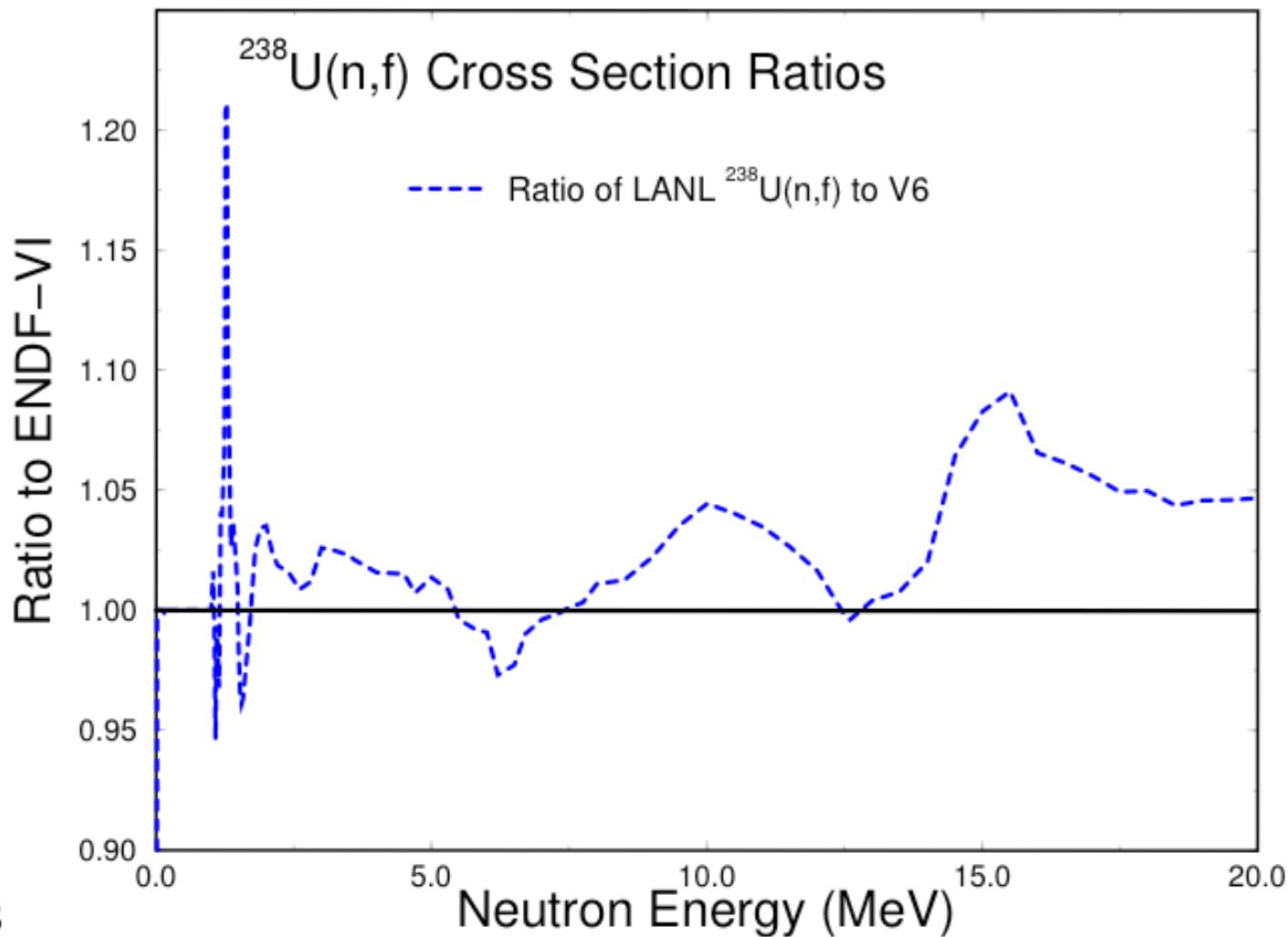
Double-differential neutron spectra (10/10)



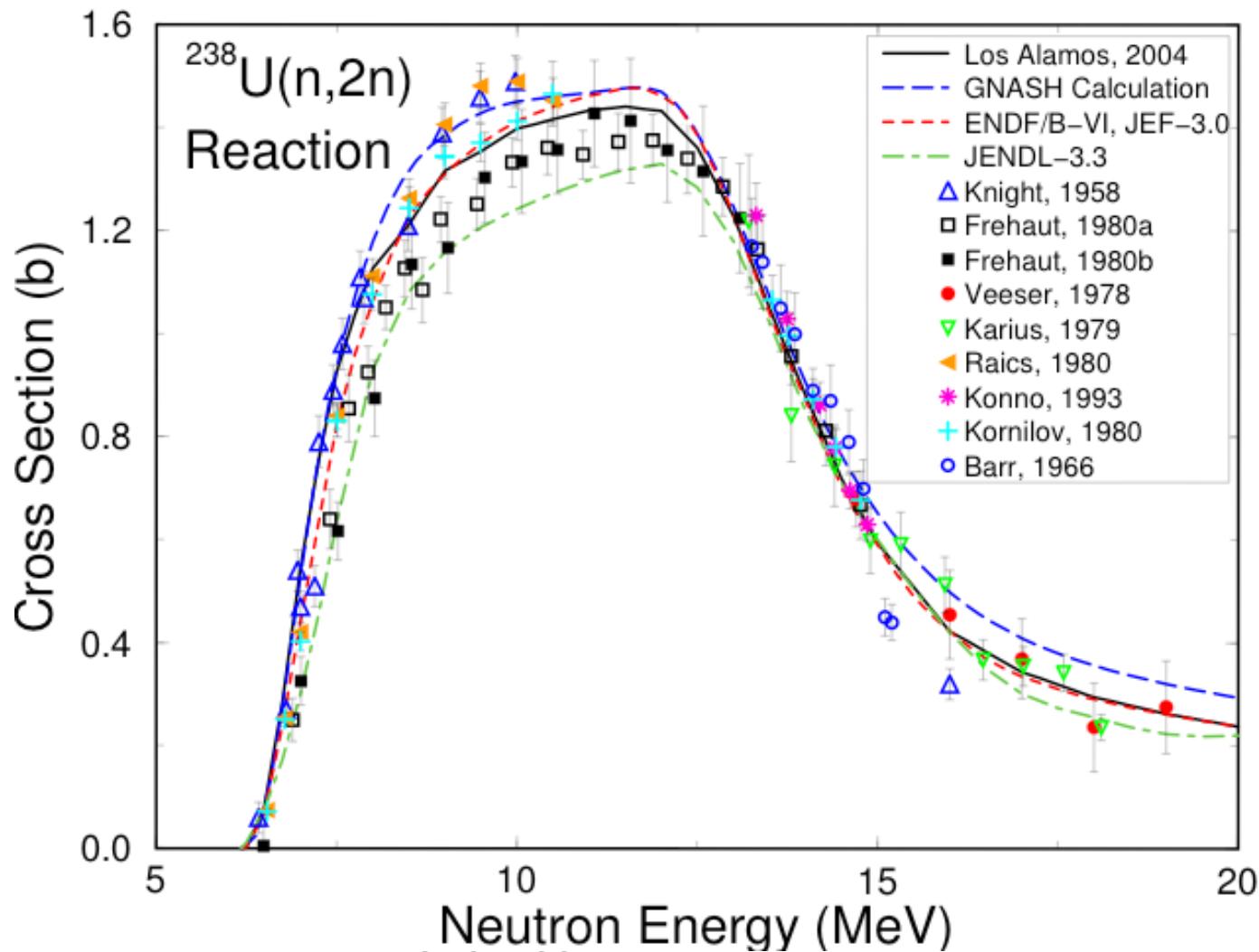
$^{238}\text{U}+\text{n}$ angle-integrated neutron spectra, $E_n=14.05 \text{ MeV}$



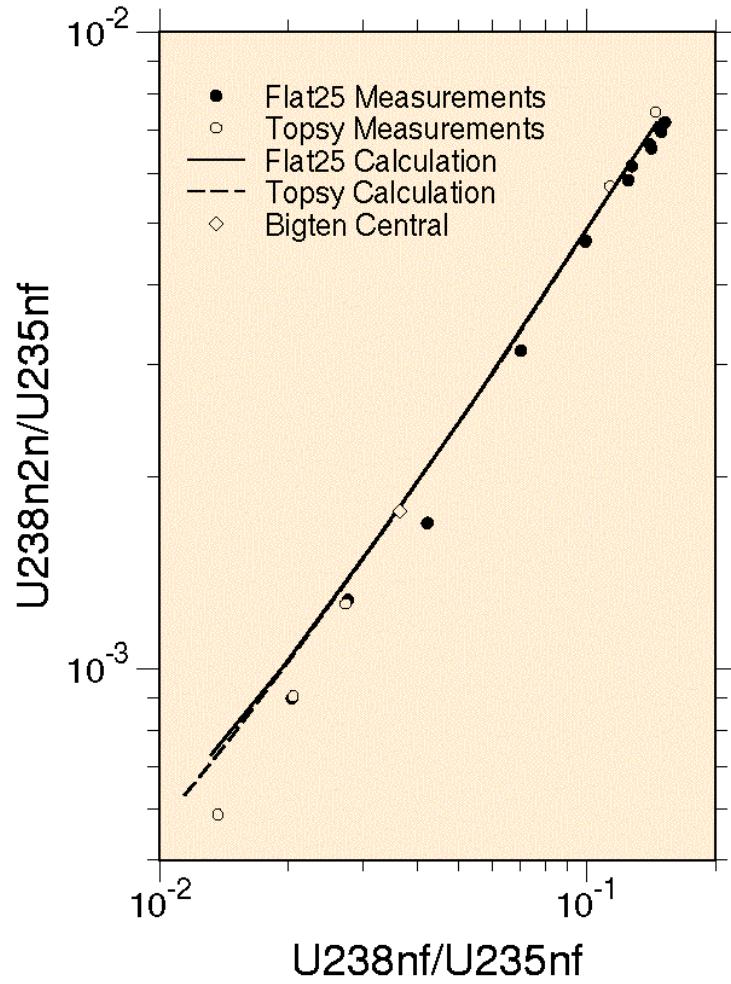
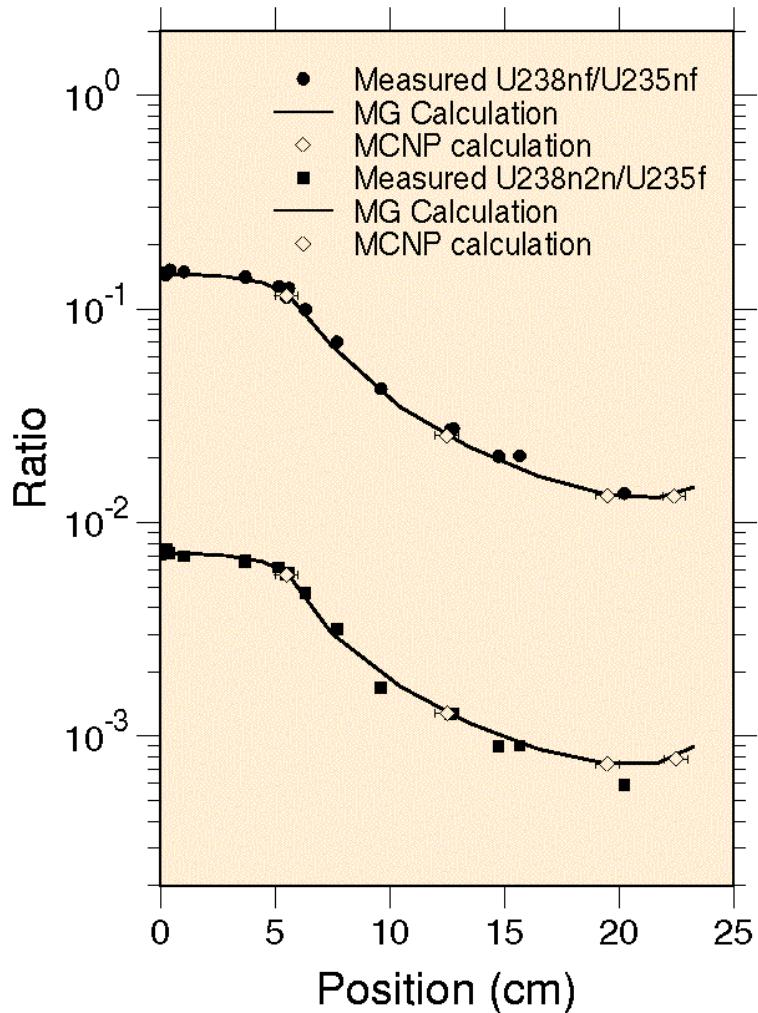
Ratio of LANL revised $^{238}\text{U}(n,f)$ cross section to the ENDF/B-VI $^{238}\text{U}(n,f)$ cross section



Measured and evaluated $^{238}\text{U}(n,2n)$ cross section



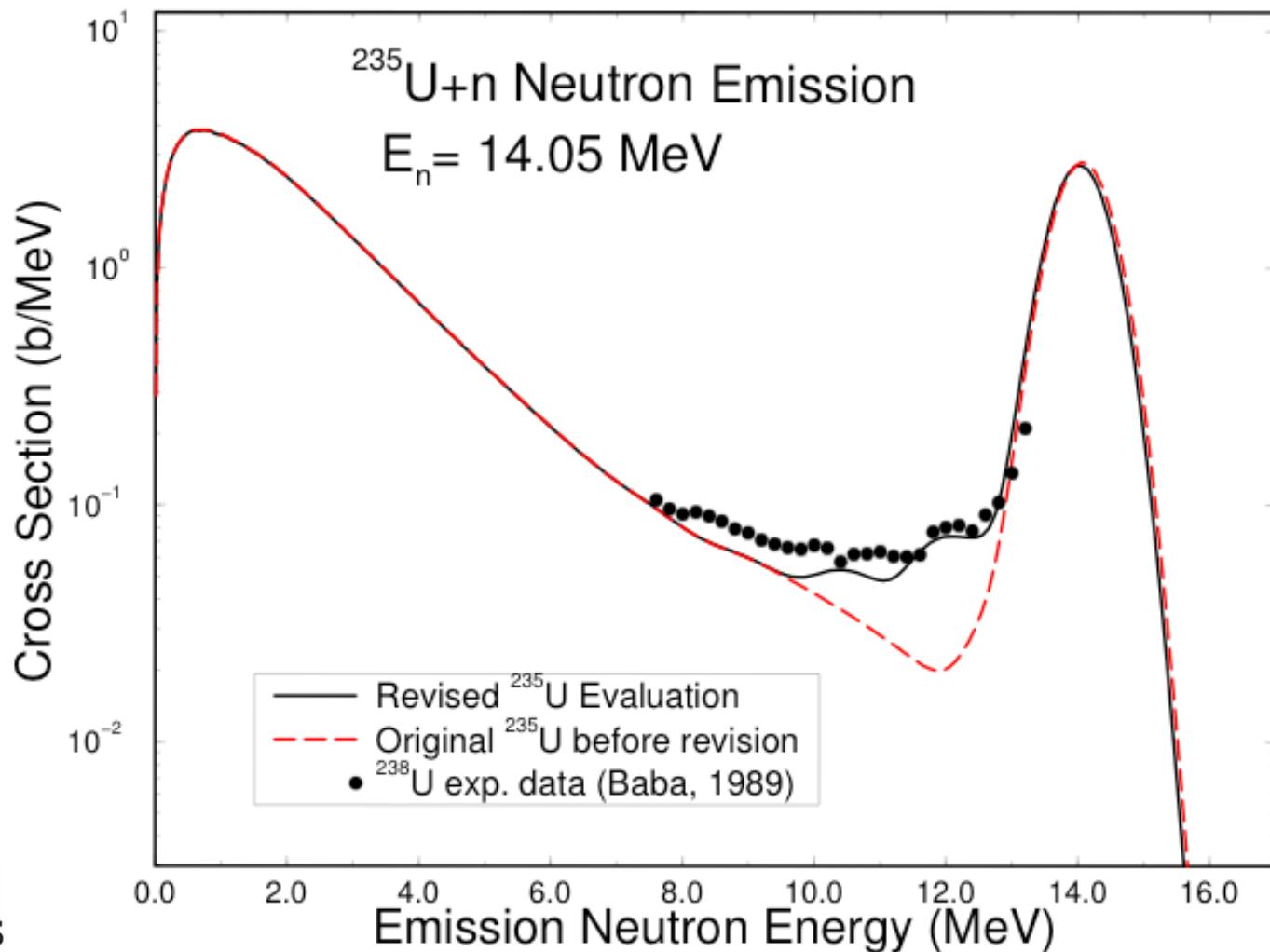
Integral validation of $^{238}\text{U}(n,2n)$ cross section; Measurements of rates inside critical assemblies



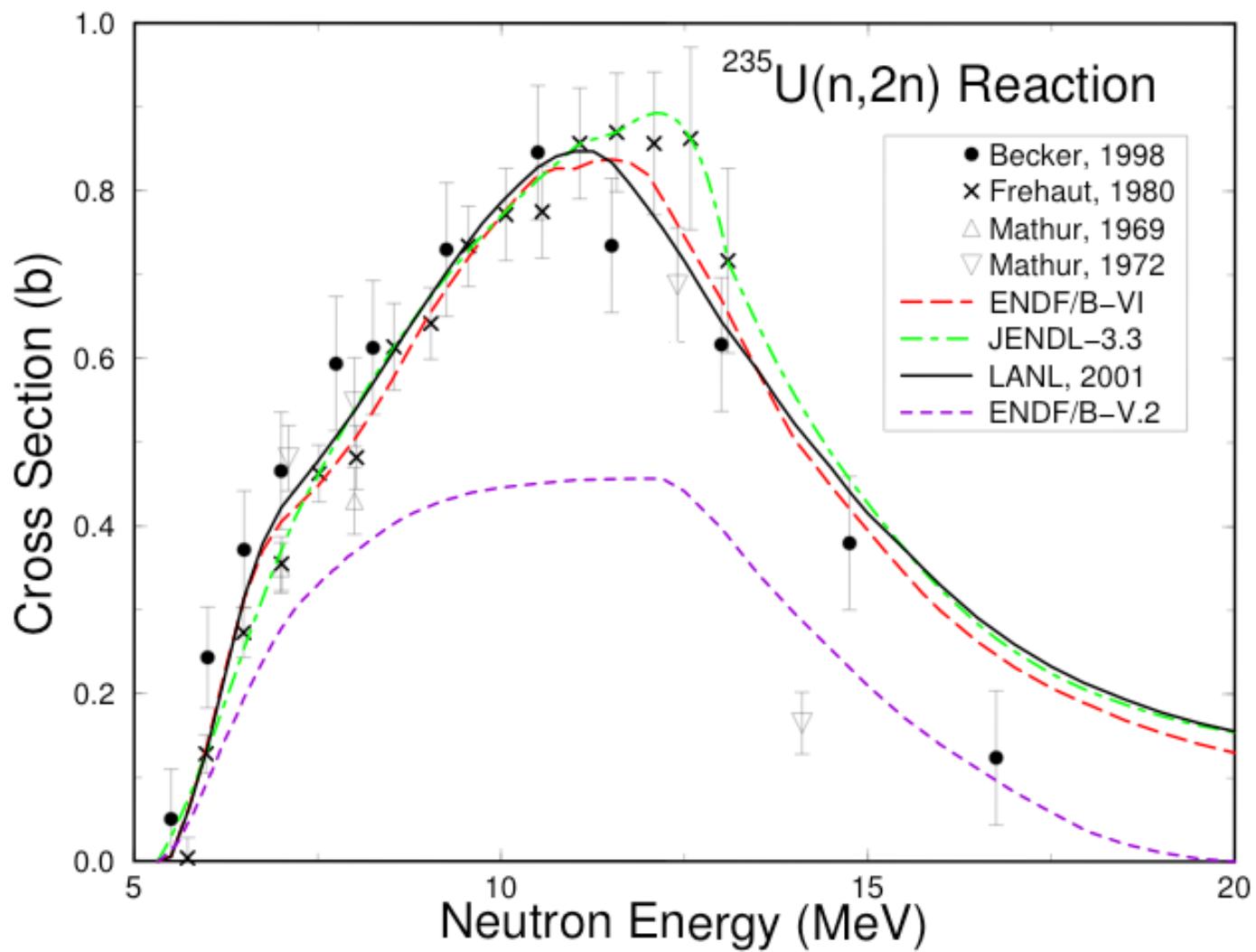
EST. 1943

UNCLASSIFIED

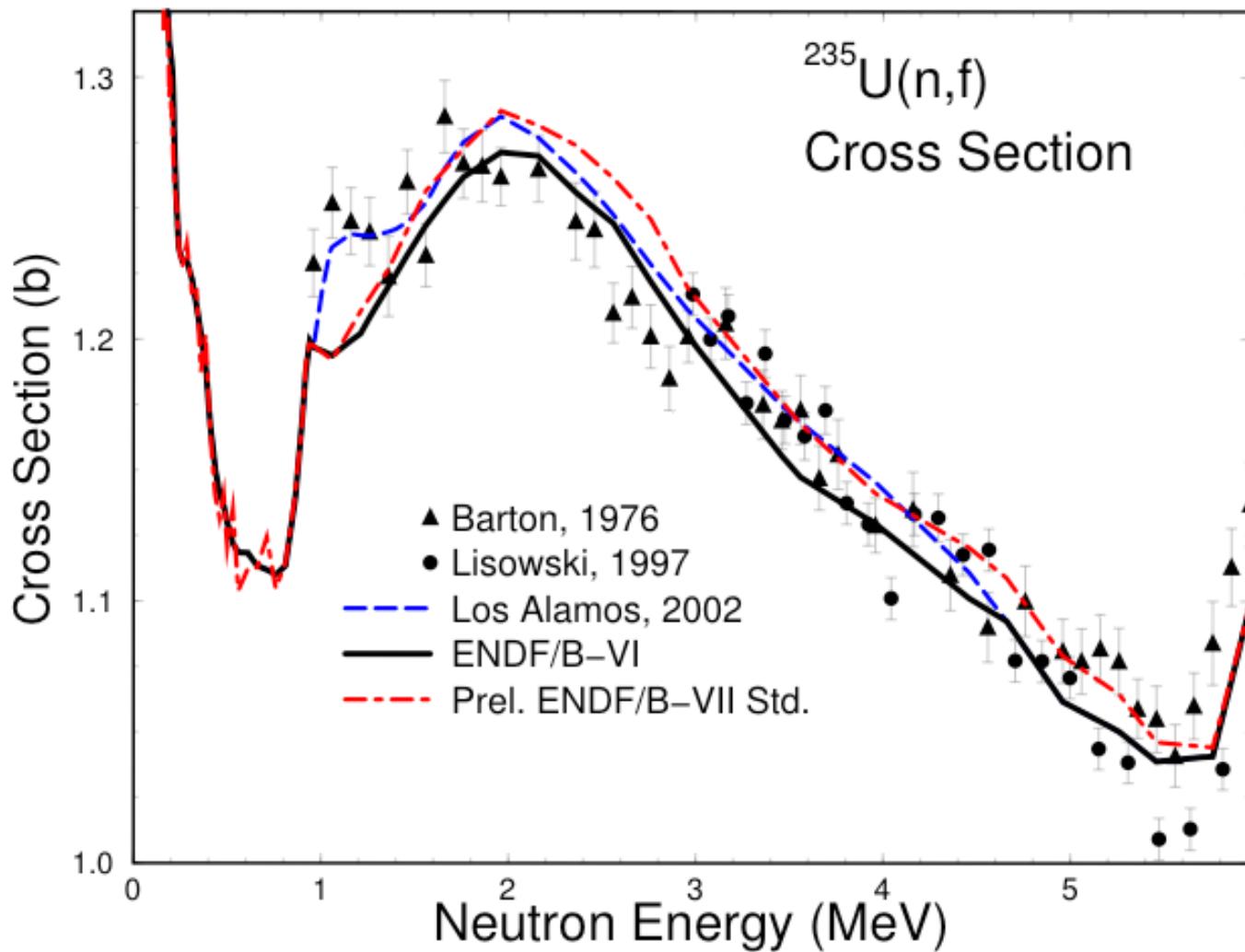
$^{235}\text{U}+\text{n}$ angle-integrated neutron spectra, $E_{\text{n}}=14.05$ MeV, compared to ^{238}U experimental data



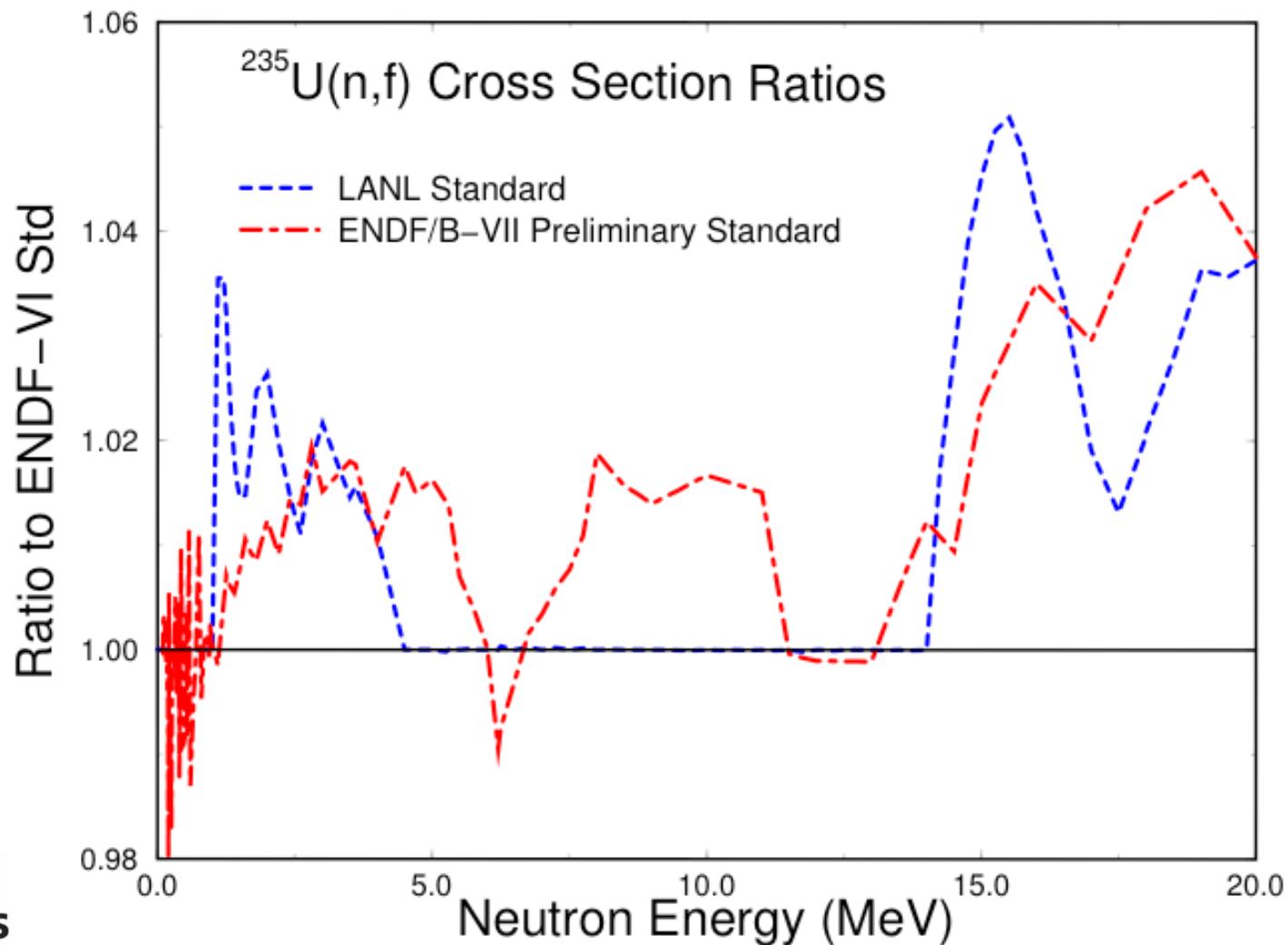
Measured and evaluated $^{235}\text{U}(n,2n)$ cross section



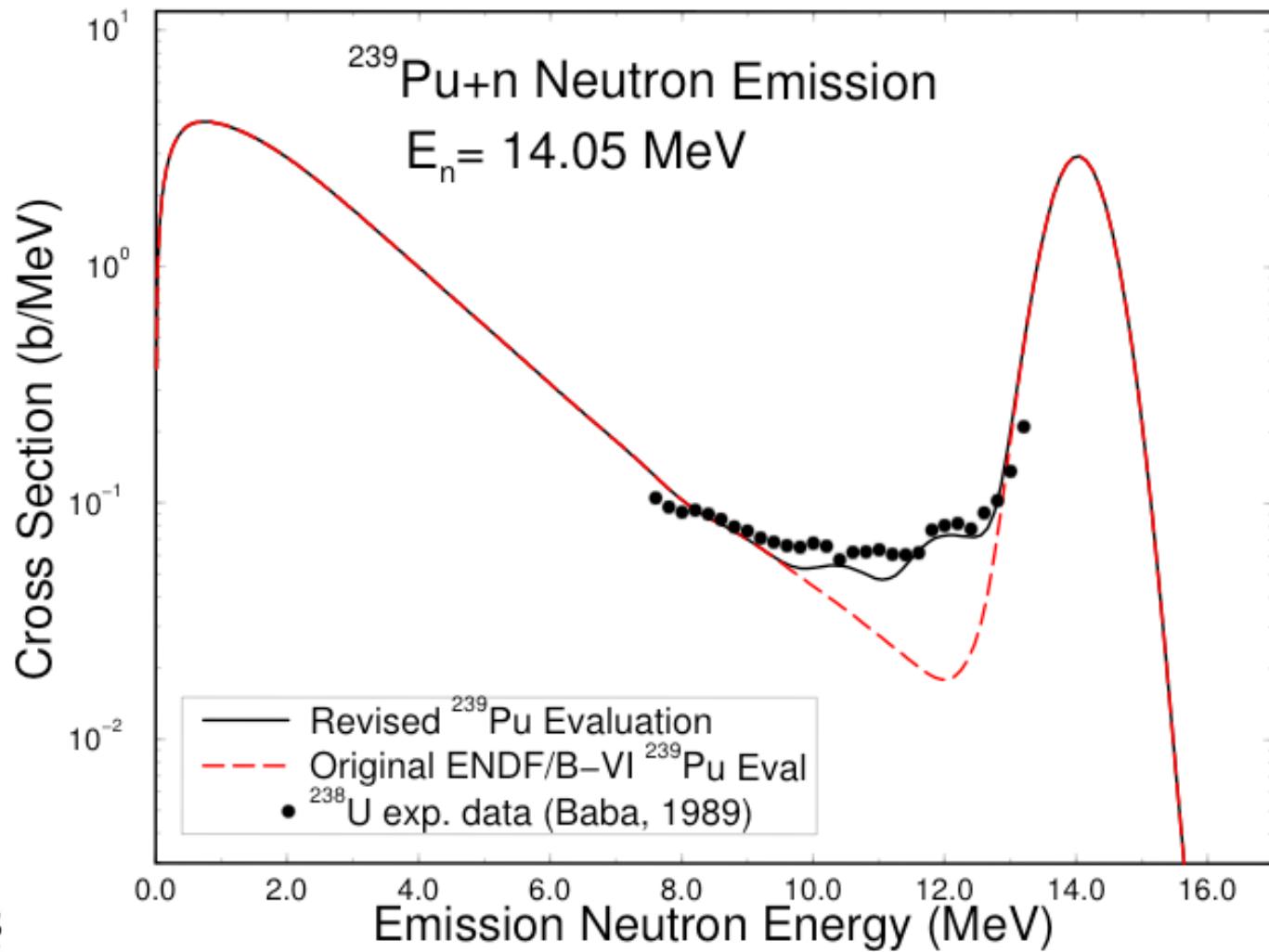
Measured and evaluated $^{235}\text{U}(n,f)$ cross sections between $E_n=0\text{-}6 \text{ MeV}$



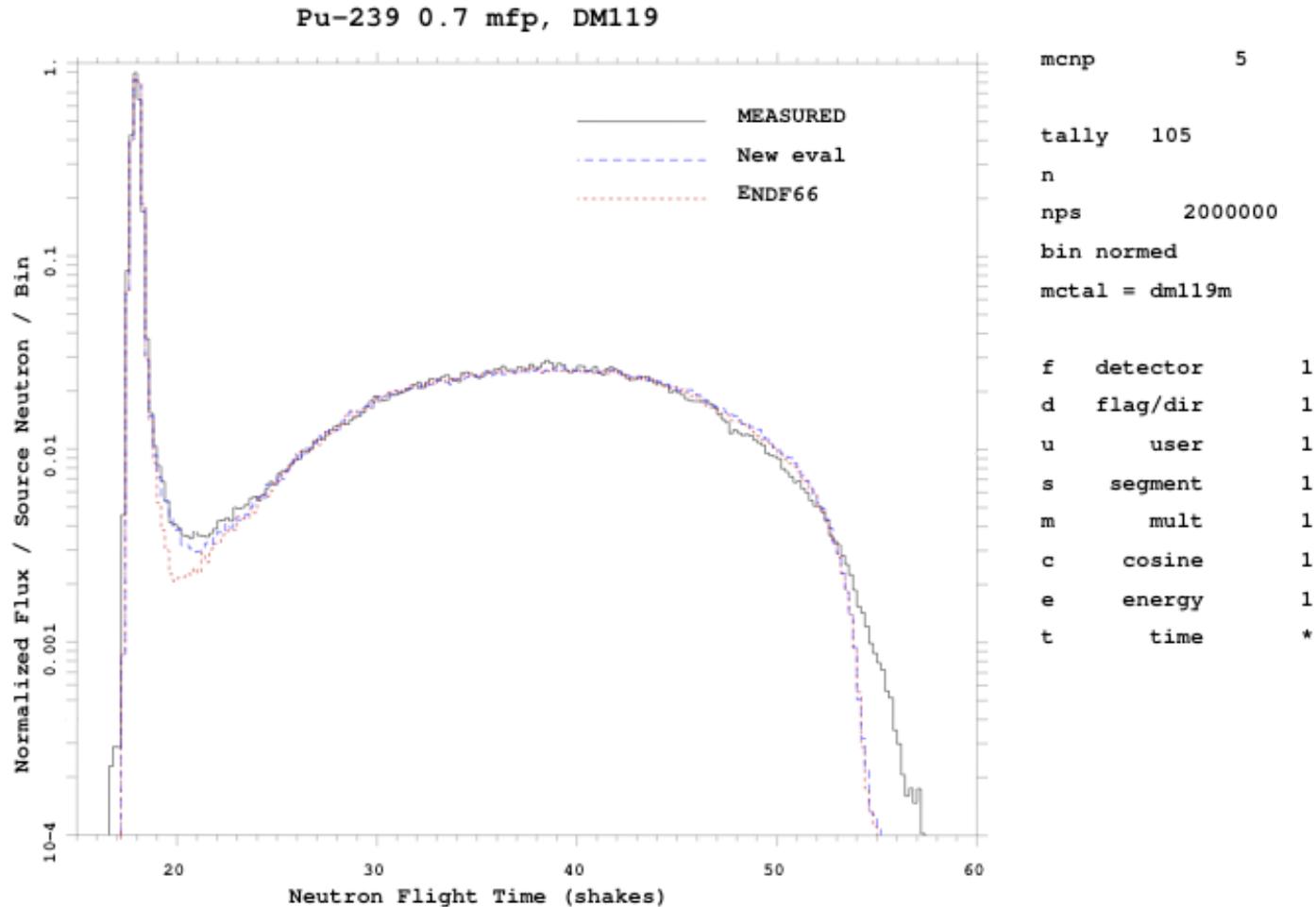
Ratio of $^{235}\text{U}(n,f)$ standard cross section to ENDF/B-VI standard



$^{239}\text{Pu}+\text{n}$ angle-integrated neutron spectra, $E_n=14.05$ MeV, compared to ^{238}U experimental data



Livermore ^{239}Pu pulsed-sphere ToF neutron data compared to calculation with previous and revised ^{239}Pu evaluations



Measured and evaluated $^{239}\text{Pu}(n,2n)$ cross section

