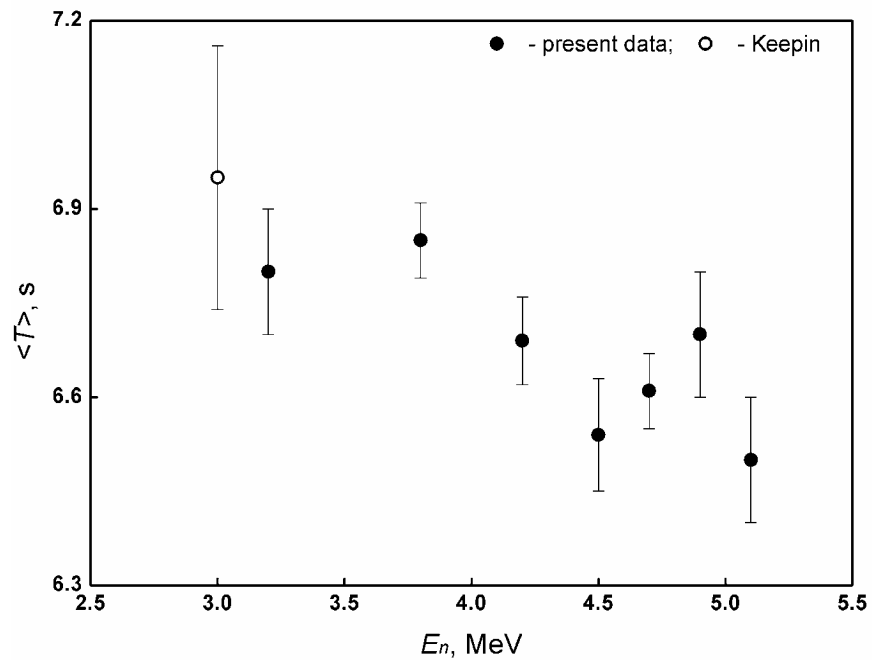
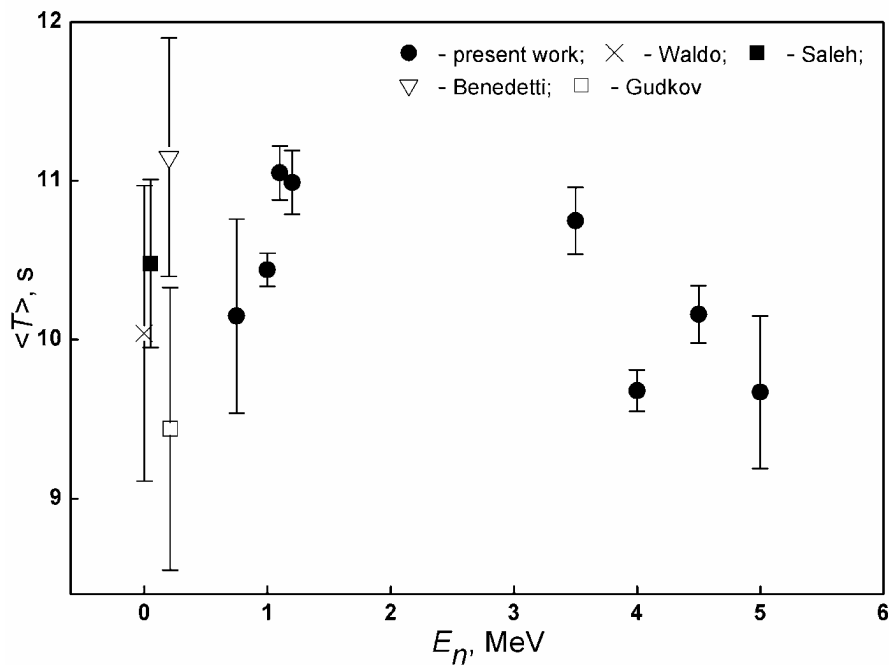


Nuclear Data Measurements in Russia

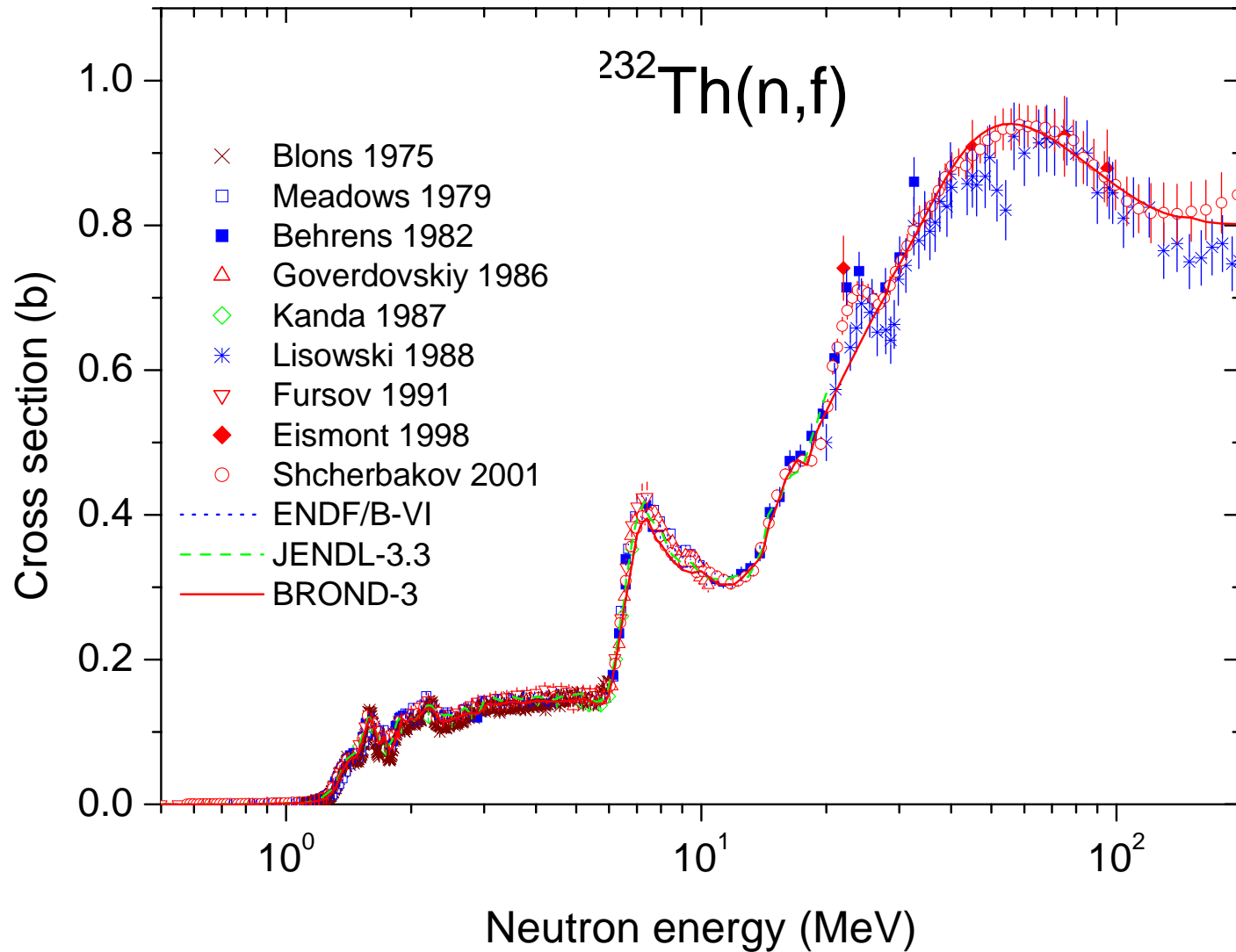
Measurements at IPPE (Obninsk)

- The total and relative group yields of delayed neutrons, as well as the corresponding group half-life times, were measured in the last year for ^{232}Th in the incident-neutron energies between 3.5 and 5 MeV and for ^{241}Am in the energy range from 0.75 to 5 MeV.
- Works were continued on preparations to measurements of the fission cross sections at the region of unresolved resonances for strongly radioactive americium and curium isotopes with the new lead-slowing-down spectrometer at the Institute of Nuclear Research RAN (Troitsk).
- IPPE specialists taken active part at the n_TOF measurements of the fission cross sections for uranium and americium isotopes.

Energy dependence of the average half-life of delayed neutrons for ^{232}Th (left) and ^{241}Am (right).



Evaluations of the fission cross section of ^{232}Th at high energies

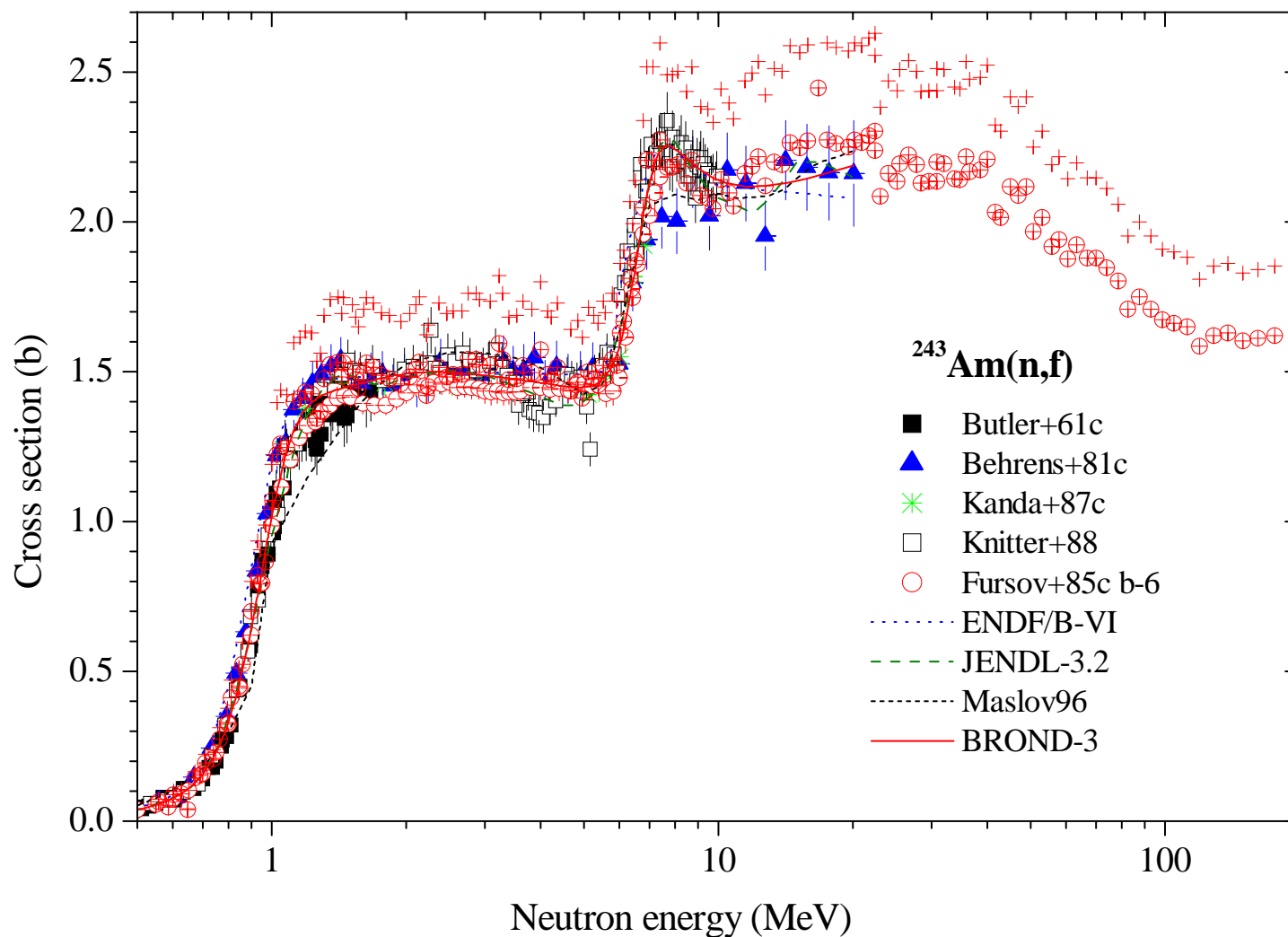


Nuclear Data Measurements in Russia

Measurements at the Radium Institute (St.Petersburg):

The processing of data on the high-energy neutron-induced fission cross-sections of actinides measured before with the GNEIS facility (PINP, Gatchina) is still continued. The re-analyzed data for ^{243}Am energies are shown in Fig. 2. Uncertainties of new data are about 5% for all energies above 1 MeV. The work is performed in the frame of the Project ISTC-1971.

Preliminary (+) and final (\oplus) data on the fission cross sections for ^{243}Am in comparison with other experimental data and the available evaluations

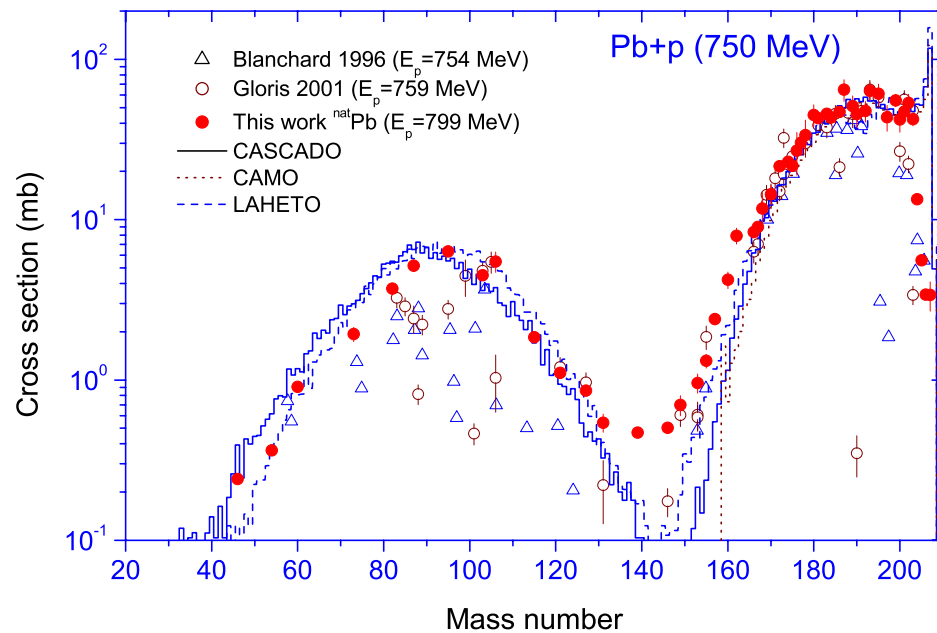
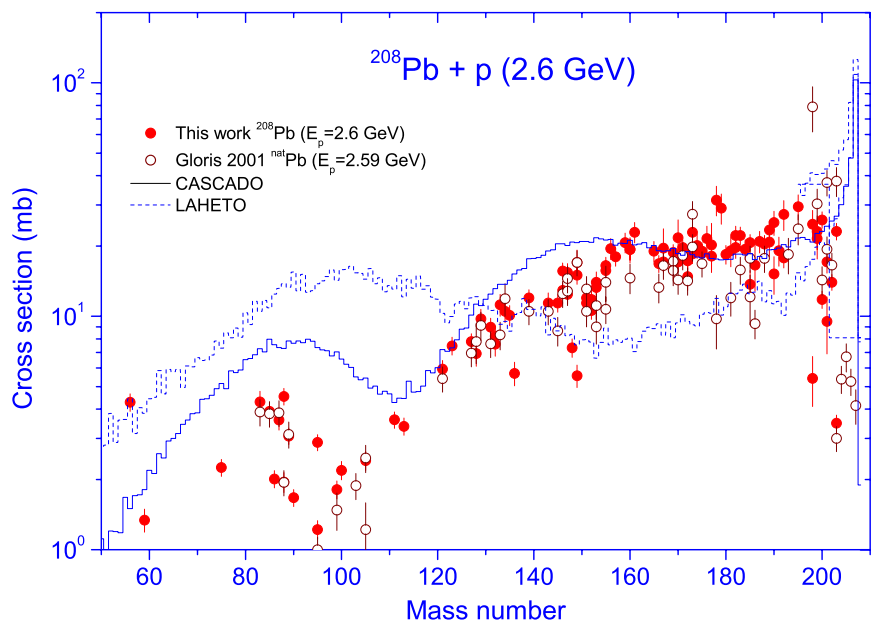


Nuclear Data Measurements in Russia

Measurements at the ITEP (Moscow)

Large amount of data on the cumulative yields of spallation and fission products was obtained during the last year for the targets of ^{206}Pb , ^{207}Pb , ^{208}Pb and ^{209}Bi irradiated by protons with energies from 40 MeV to 2.6 GeV. The adjustment of model parameters, performed for some widely used codes, improves essentially the predictive accuracy of INCM calculations. . The corresponding experimental data together with their theoretical analysis are included in the final report of the Project ISTC-2002.

Experimental data on the and residual cumulative yields (solid and open circles) for the $^{208}\text{Pb}+p$ reaction at various energies in comparison with cascade-model calculations



Continuation

