The choice of AK value

Value, to be multiplied on maximum (in output spectrum), to define the level, below which the peaks in spectrum aren't taken into consideration, *on default AK=0.0001*.

Fig. 1 presents neutron spectrum after filter with the following components:

B-10	thickness 0.28 g/cm^2
B-11	thickness 0.0496 g/cm^2
Fe-nat.	thickness 236.1 g/cm^2
Al-27	thickness 99.86 g/cm^2
S-nat.	thickness 16.35 g/cm^2

If *AK=0.0001* (as it can be seen from output file F_RES\inpfile.LST for this spectrum AK*Fmax=.143214E-01) our code finds 20 split peaks, then joins several of them and gives only 8 joint peaks (shown with red figures). Peaks, that are lower than red line (lower AK*Fmax=0.0143214), aren't taken into consideration.

The choice of *AK* has to be founded in analysis how much the sum of squares under separated peaks differs from the square under the entire function T*SPECTRUM. In this example this sum amounts 99.847% of the entire square, so the difference is less than 0.153%. The choice of *AK=0.0001* is valid.

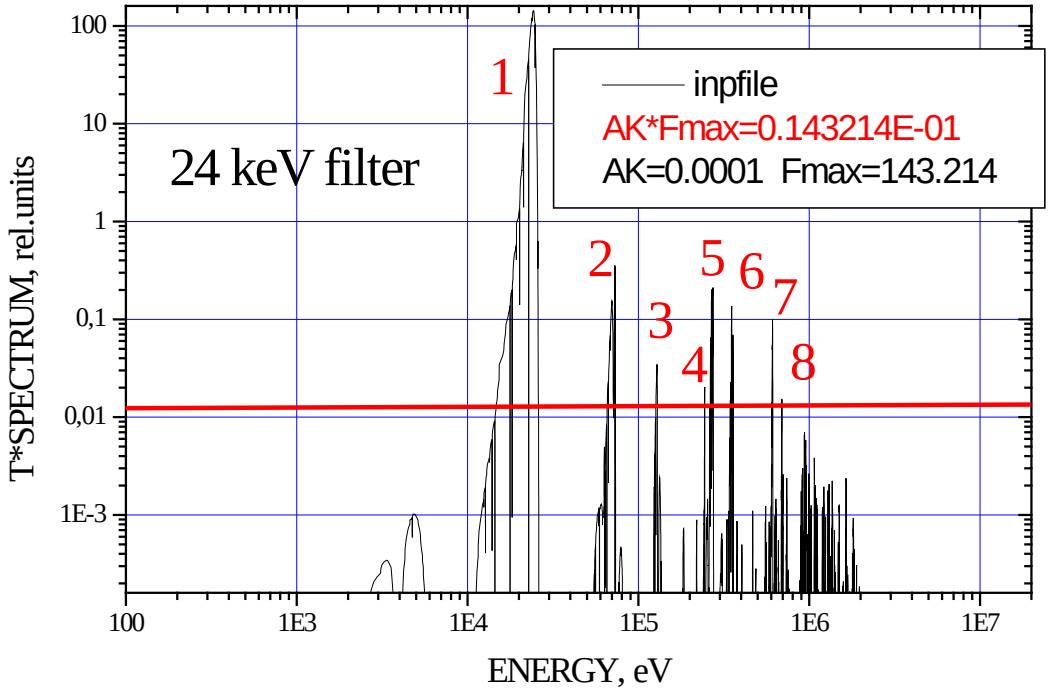

Fig. 1. Neutron spectrum after filter.