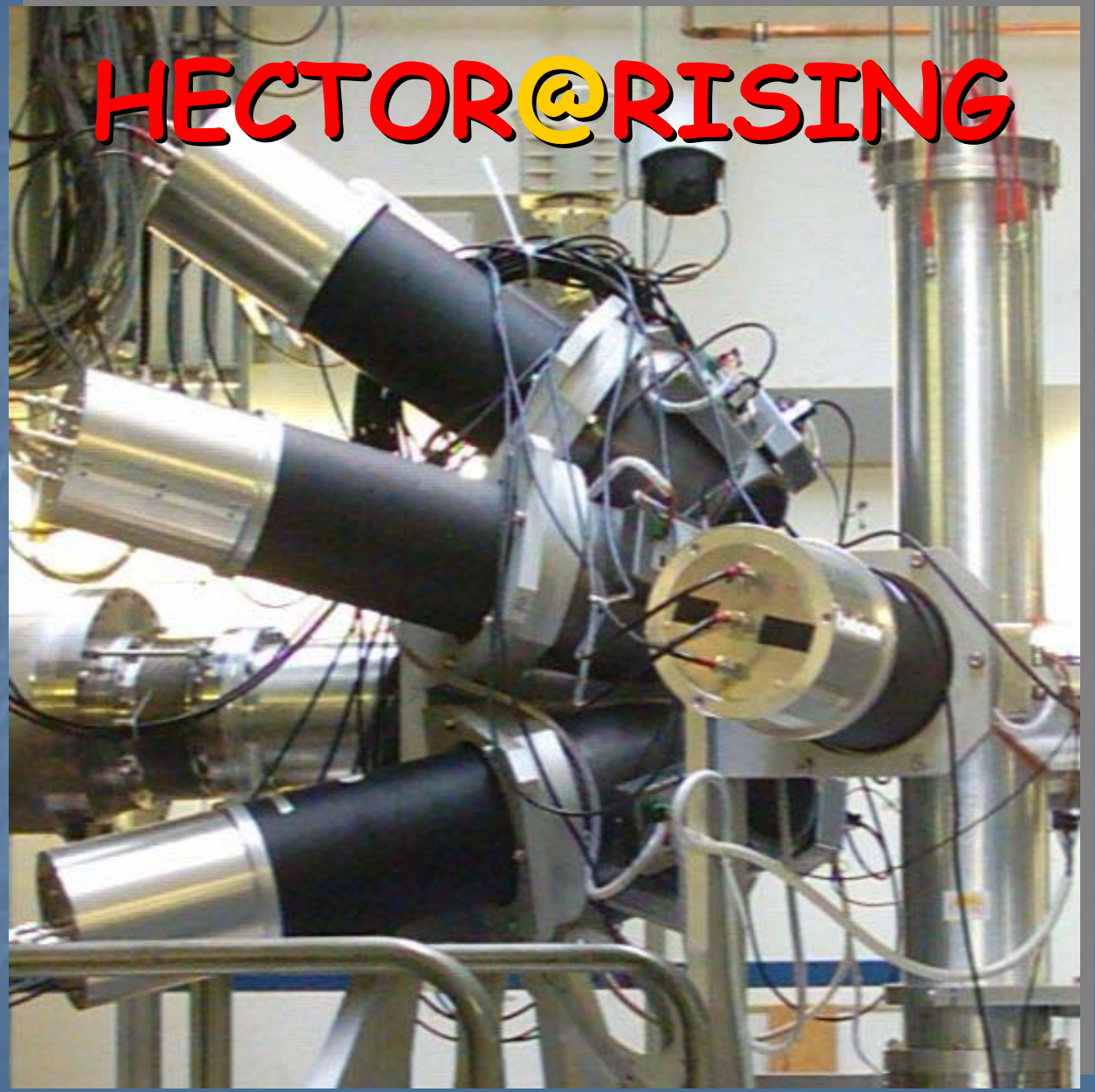
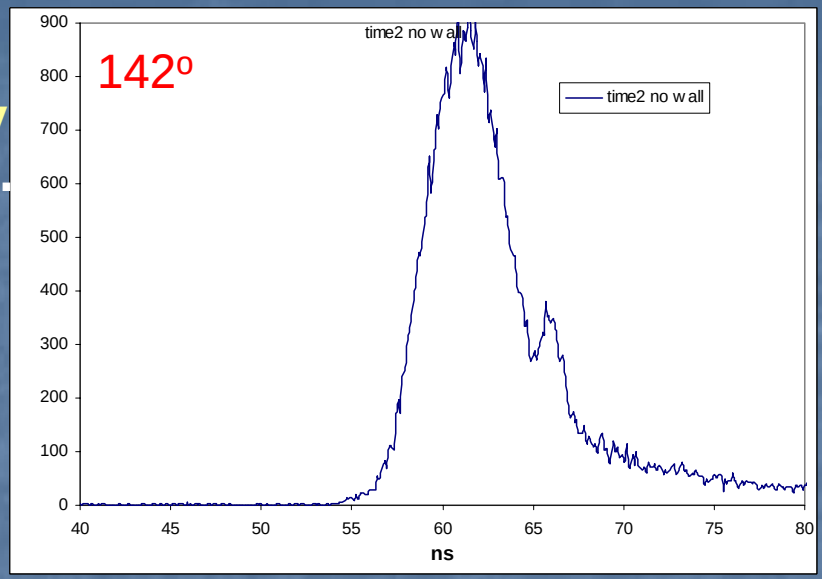
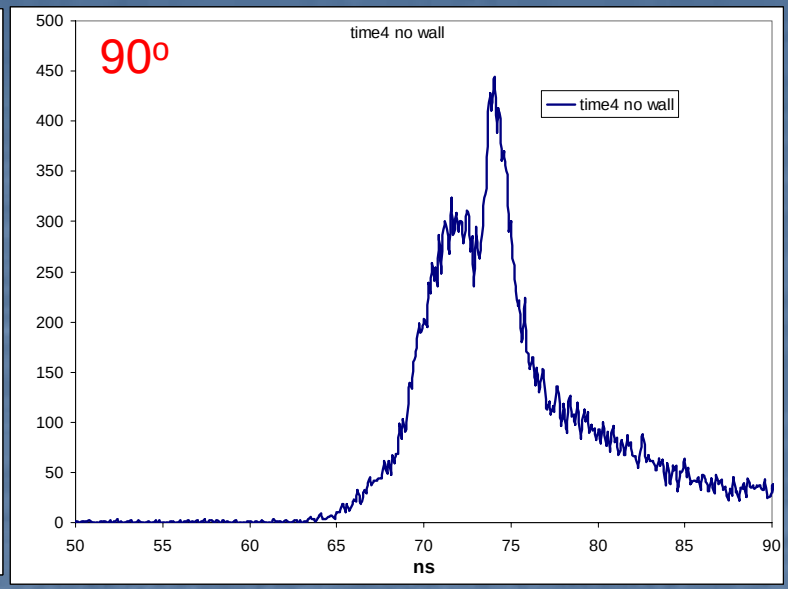
HECTOR@RISING



Thick (0.2 g/cm^2) Au target, 150 MeV/u ^{132}Xe beam

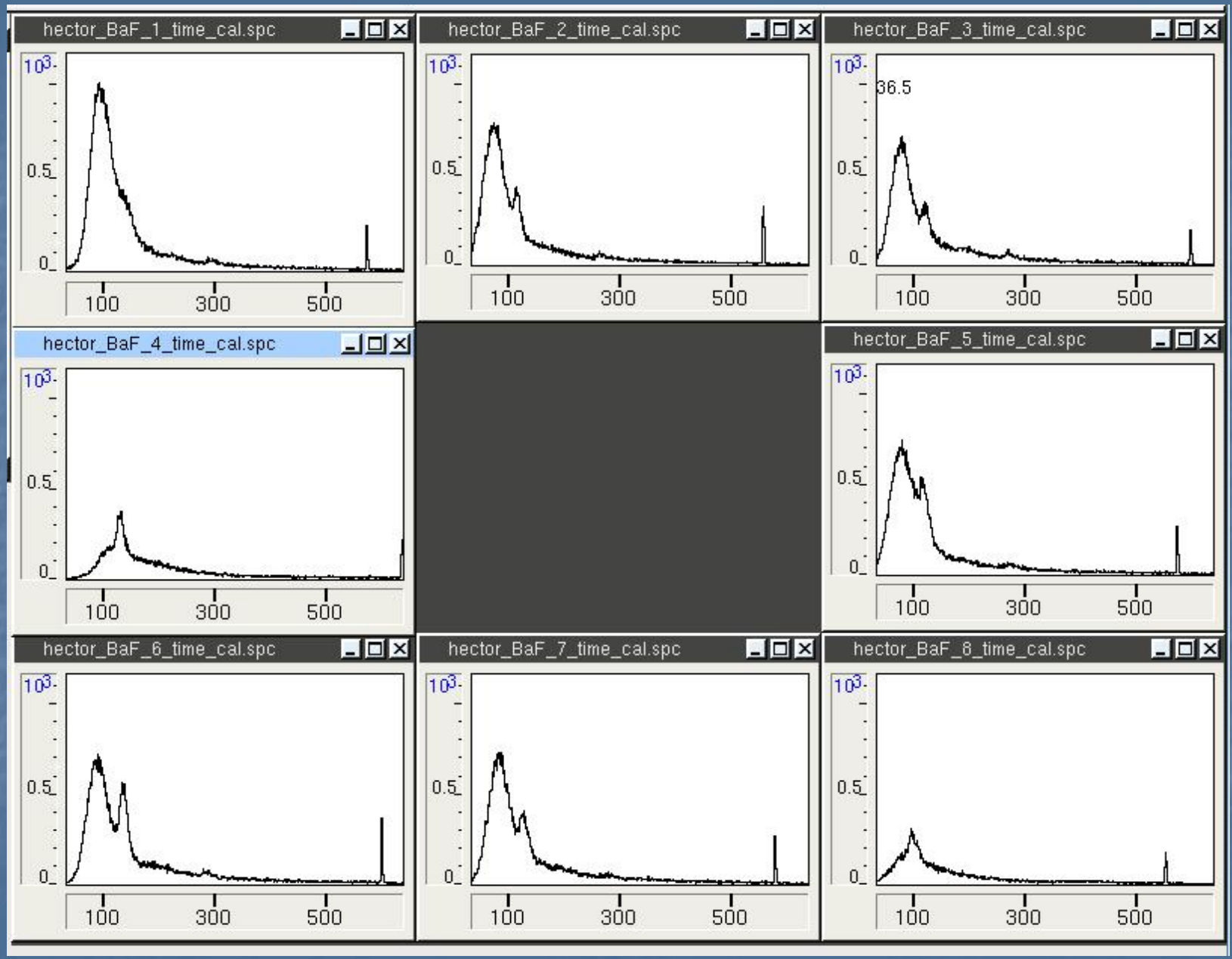
At the very beginning..



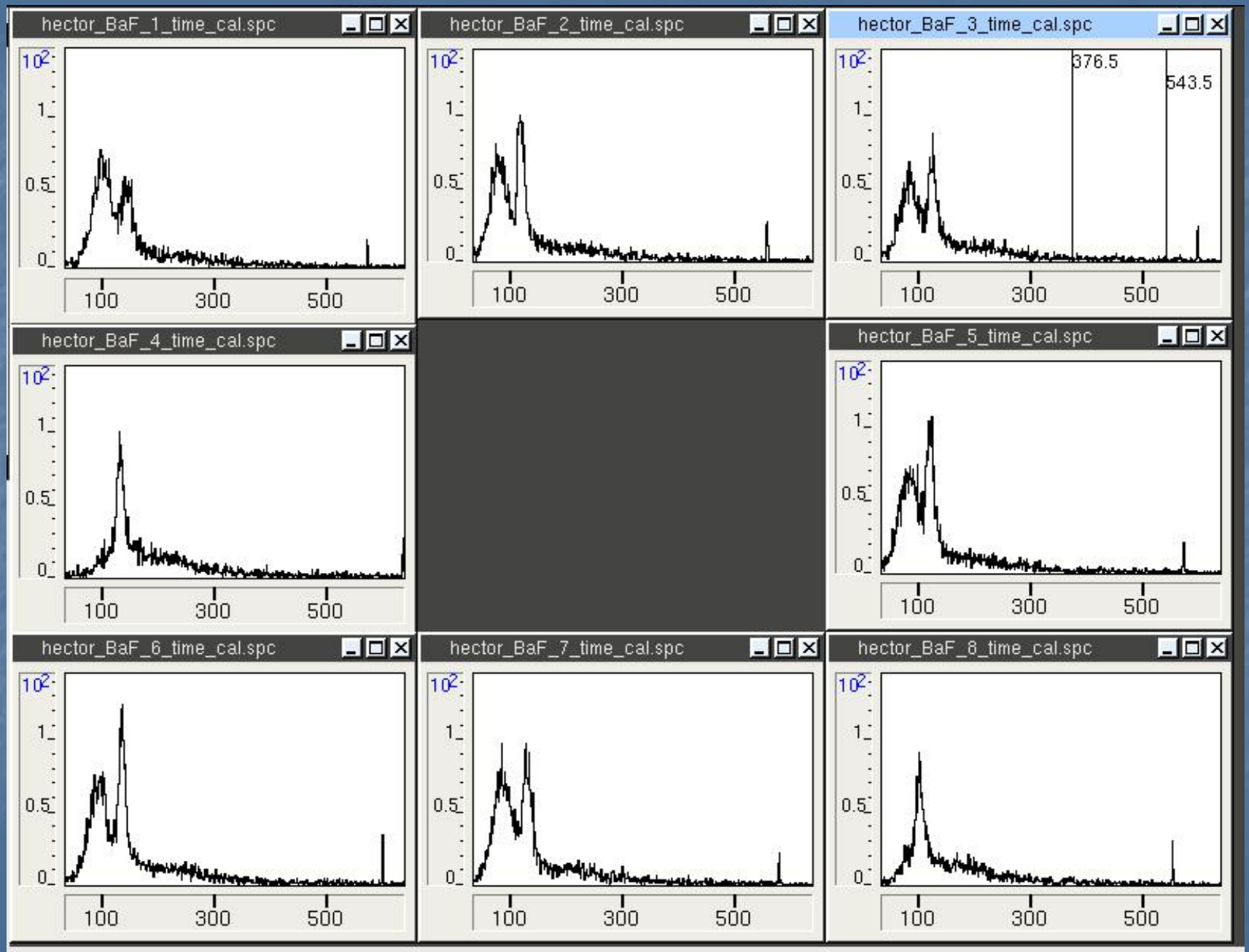


BaF_2 time spectra

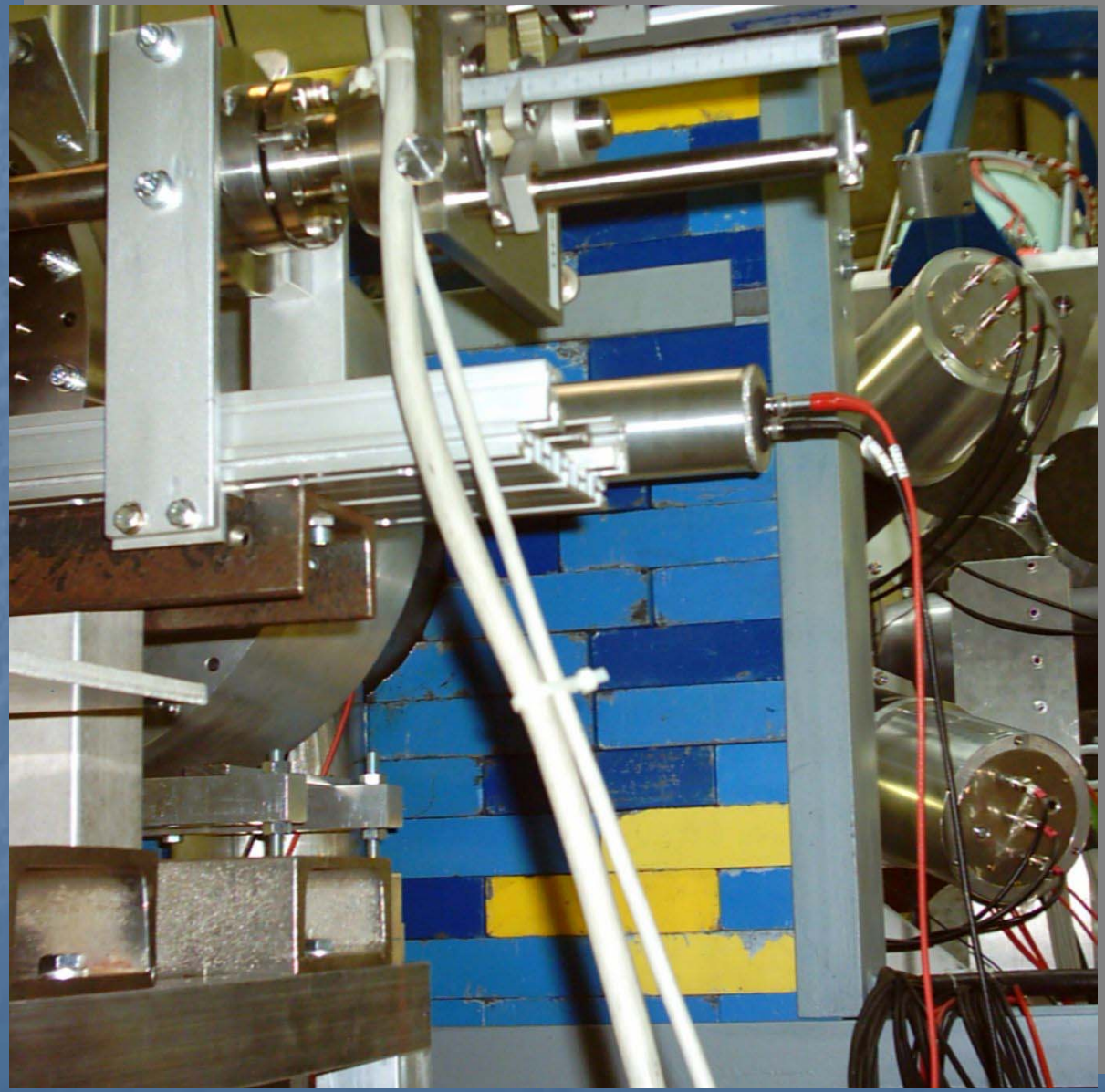
Thick (0.2 g/cm^2) Au target, 150 MeV/u ^{132}Xe beam



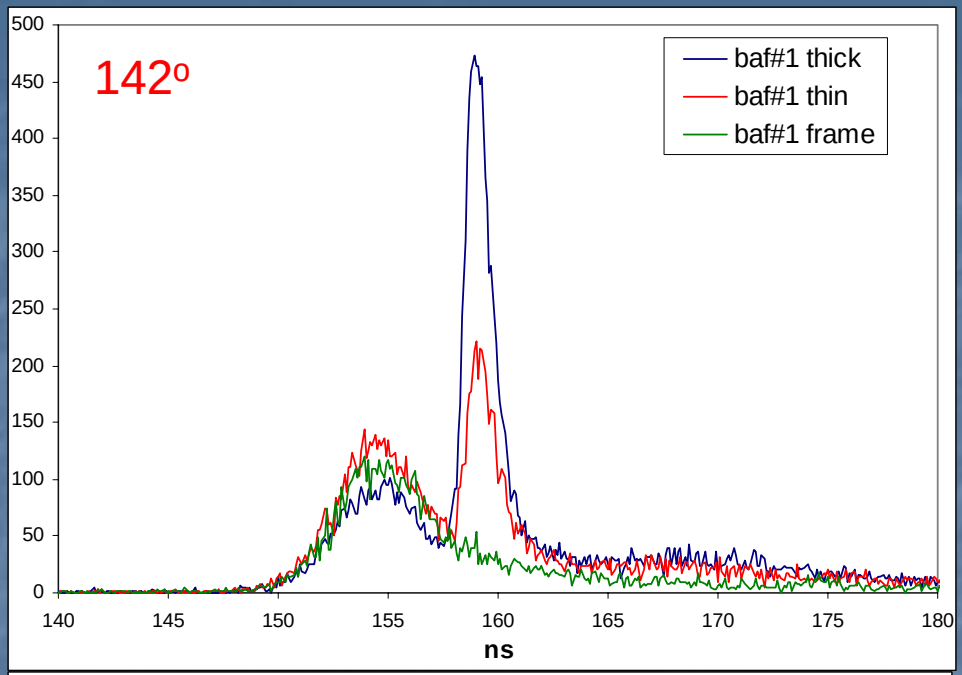
Very thick (1 g/cm^2) Pb target, 150 MeV/u ^{132}Xe beam

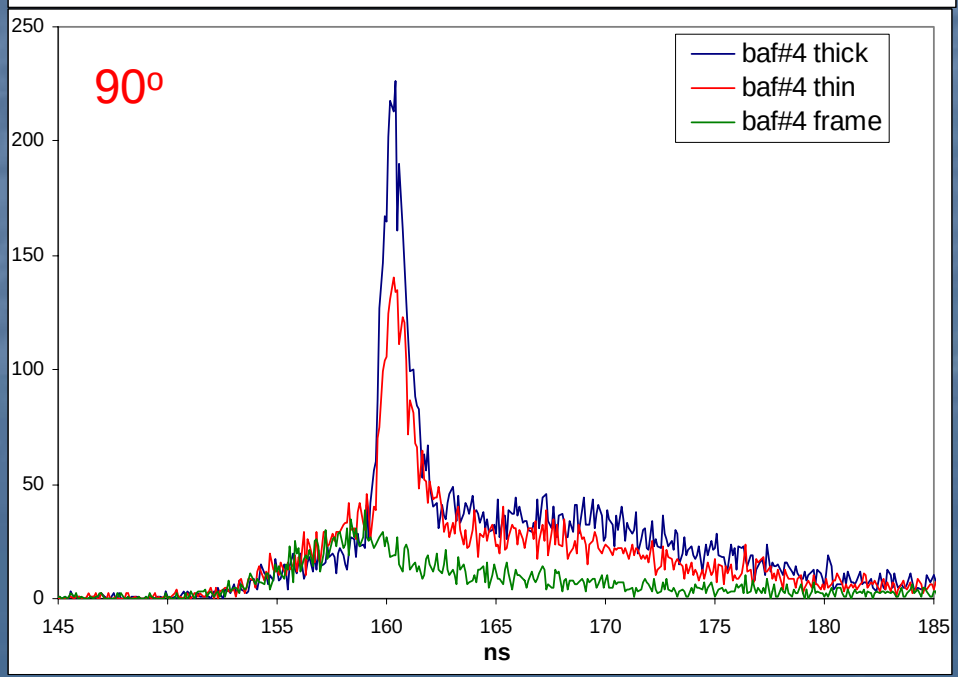


New Pb-brick wall upstream of the BaF_2 HECTOR array



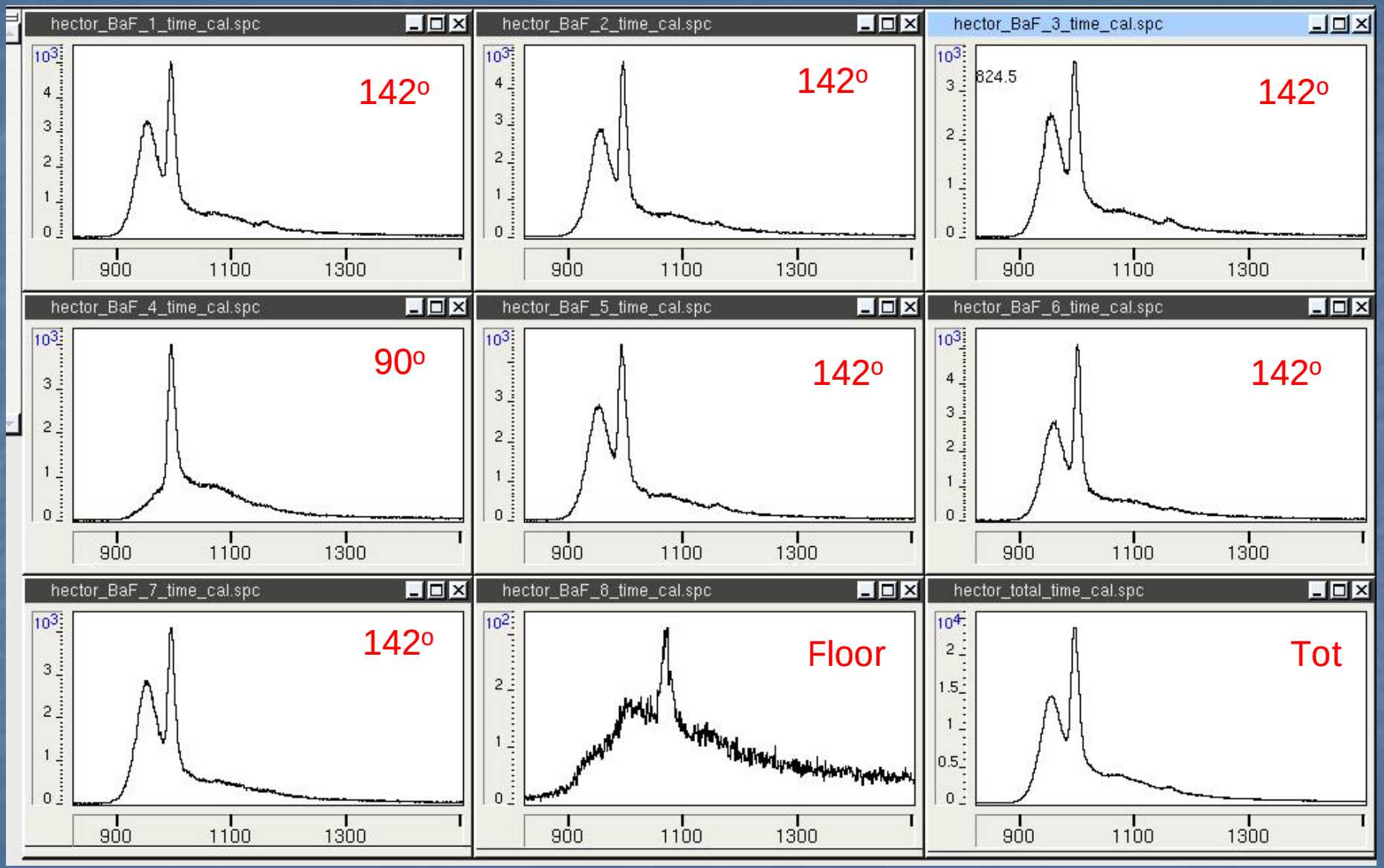
100 MeV/u ^{84}Kr beam



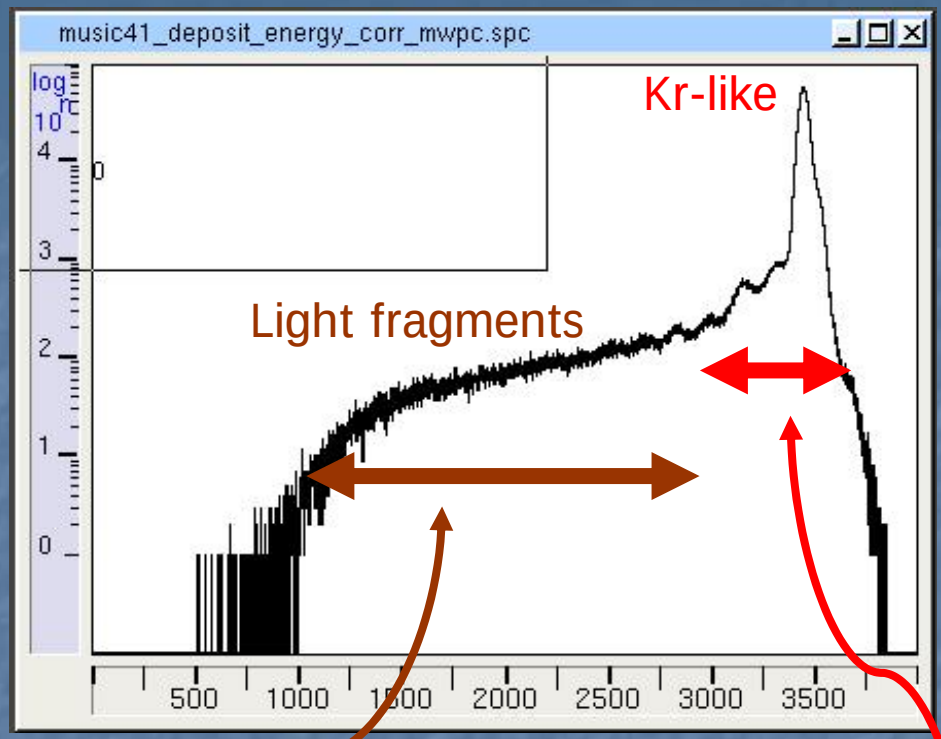


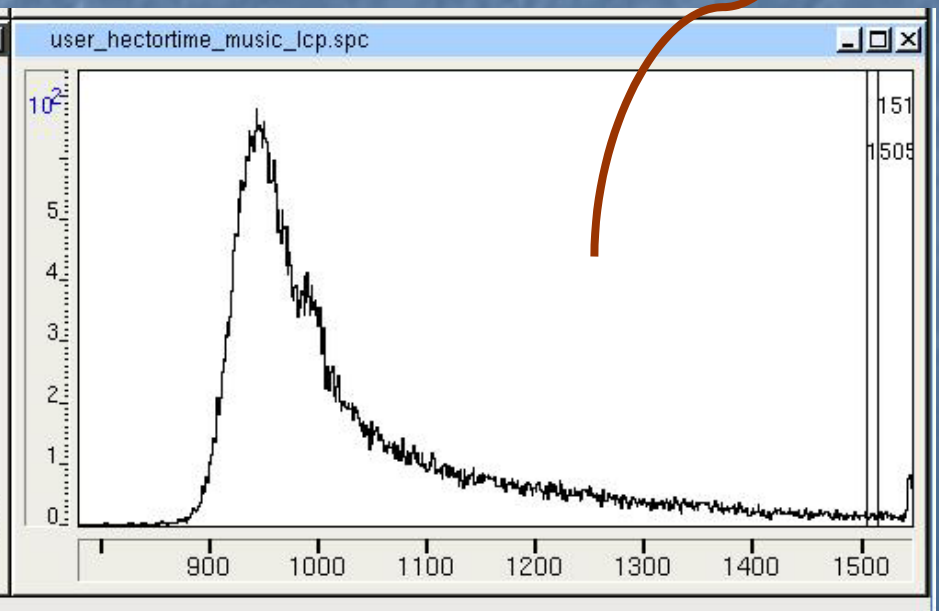
BaF time spectra
with new Pb-brick wall
for thick, thin target and
empty frame

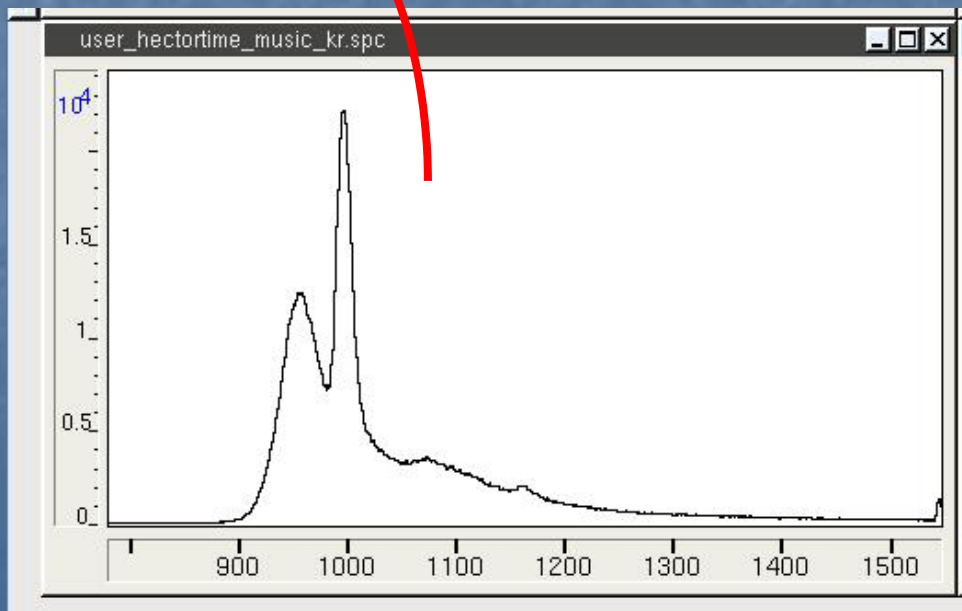
Hector time spectra (100 MeV/u ^{84}Kr beam)



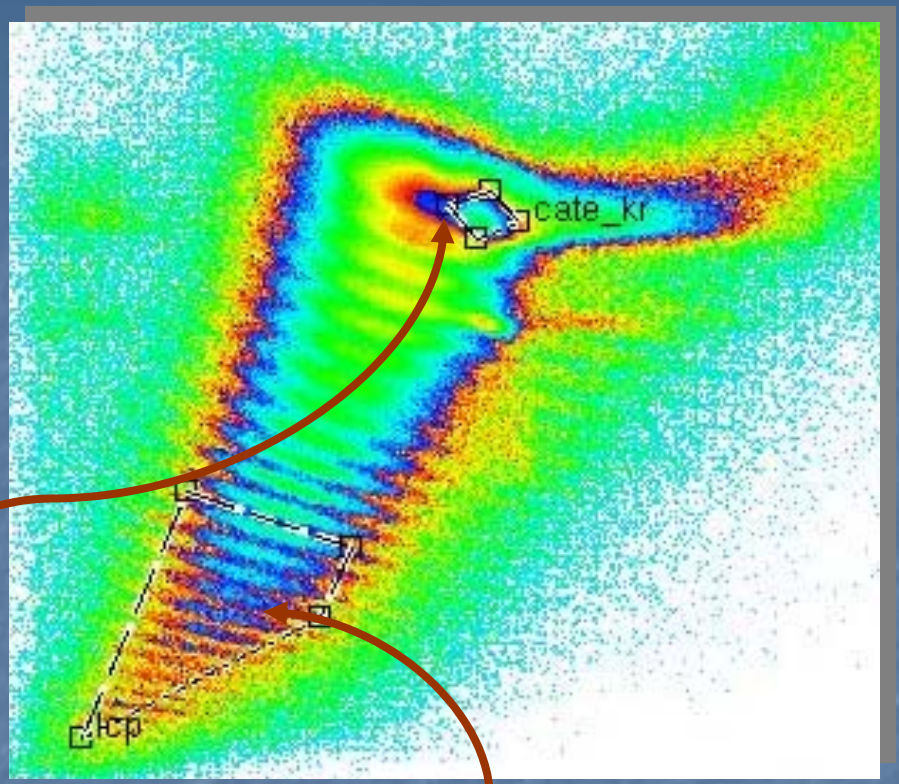
Energy deposit in MUSIC (100 MeV/u ^{84}Kr)



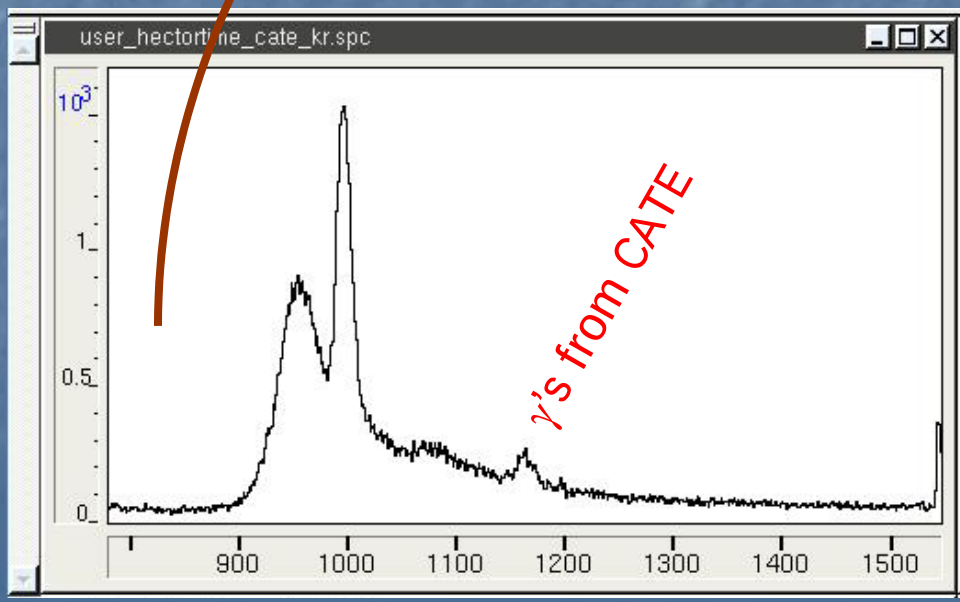


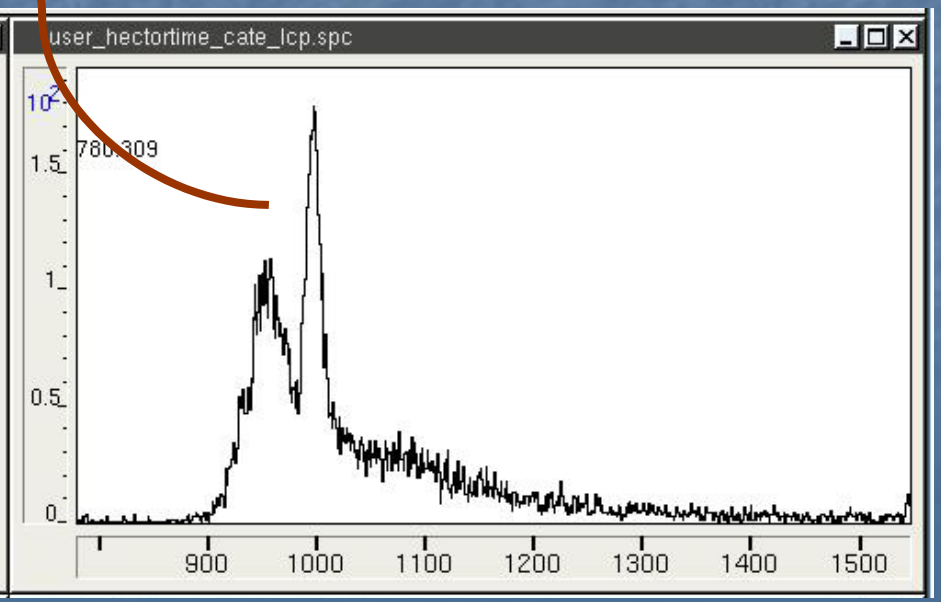


CATE (#2) ΔE vs E

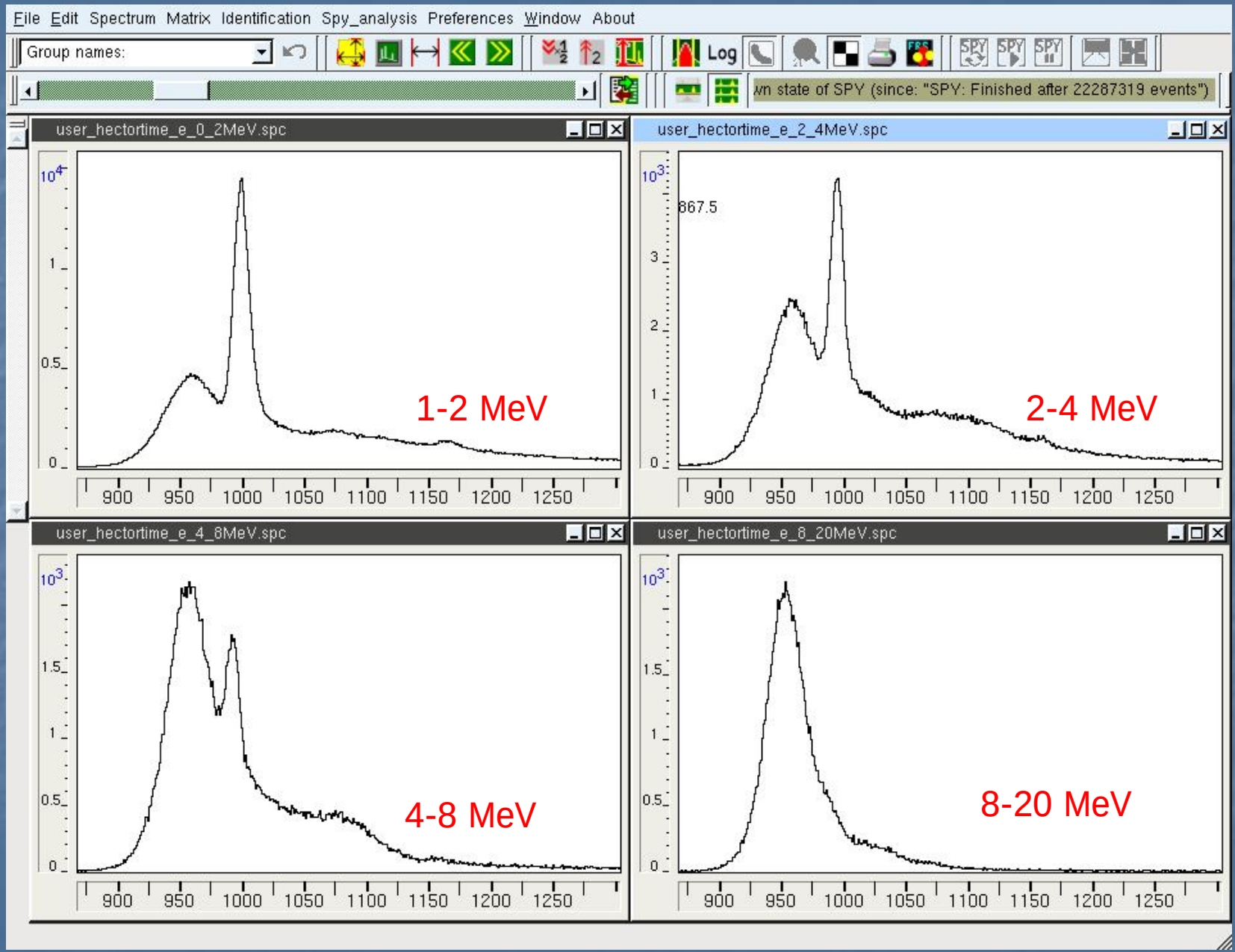

cate_kr
lcp

?

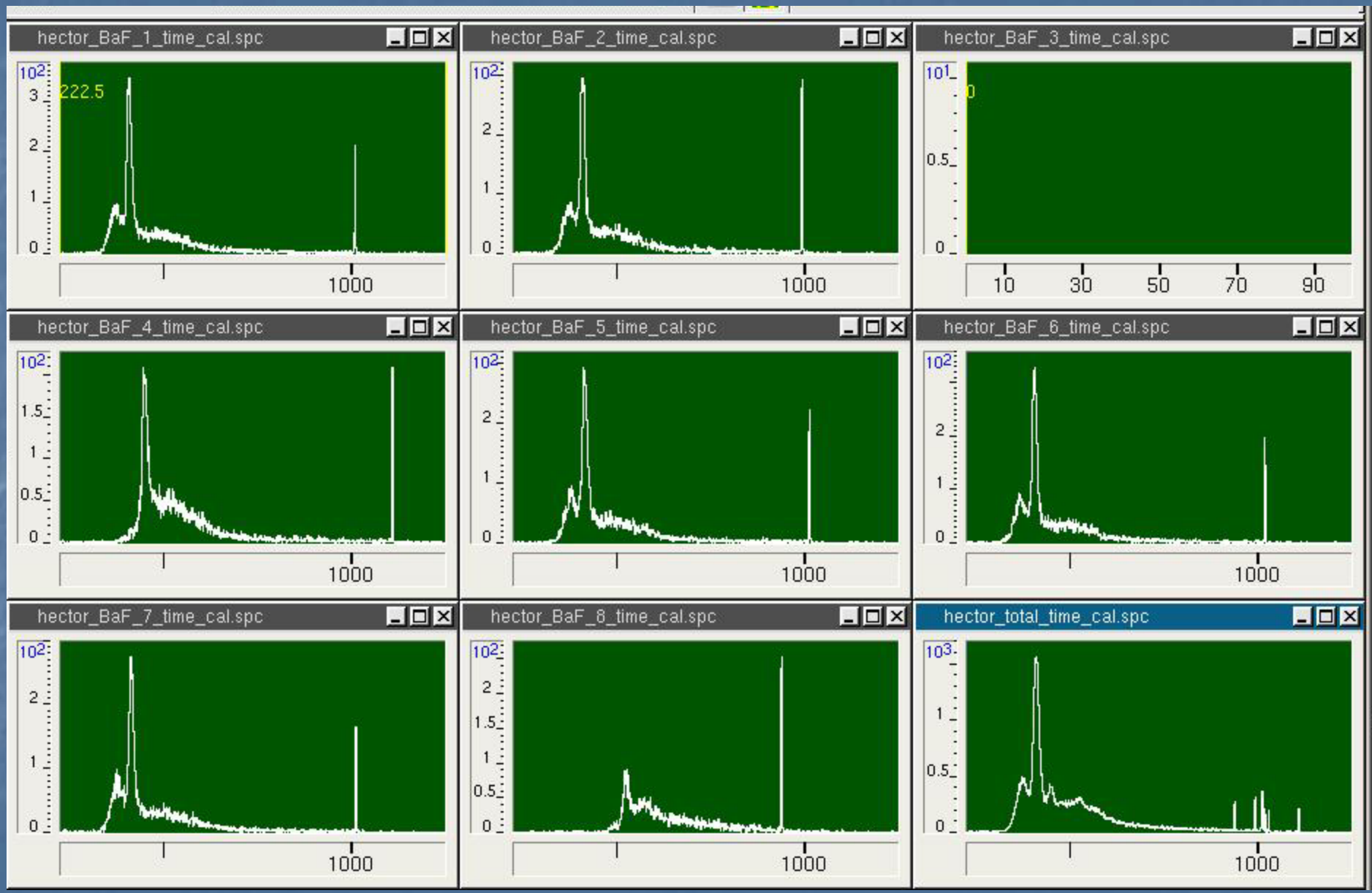

user_hectortime_cate_kr.spc
γ's from CATE
900
1000
1100
1200
1300
1400
1500


user_hectortime_cate_lcp.spc
900
1000
1100
1200
1300
1400
1500

Hector time gated by Hector energy (no Doppler correction yet!)



HECTOR times from the radioactive beam run



Conclusions

Prompt radiation from target, increasing with the target thickness

Early gamma radiation (5ns), coming from the beam line, caused by light particles ranging to very high energies (0-20 MeV)

Late gamma radiation (8-12ns) neutrons?

Gamma radiation (15ns) from the interaction of heavy ions in CATE