cross section comparison

USD nprod.tot vs SOURCES4 tape3

Silvia
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- USD total cross sections are synced on dropbox radiogenic/TotXsec_USD

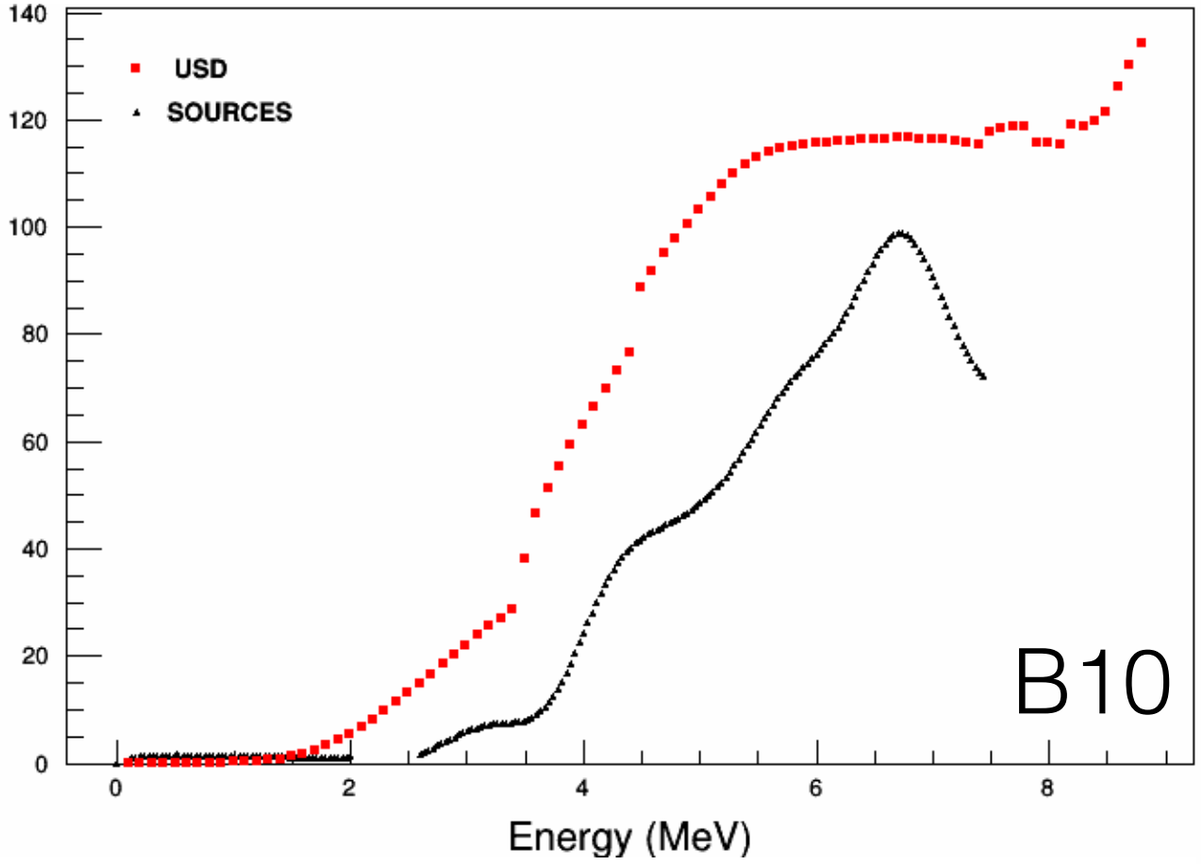
- SOURCES4 complete tape3 and single isotope cross section are synced on dropbox in radiogenic/Xsec_SOURCES4
  Mainly EMPIRE2.19 calculations + data when possible

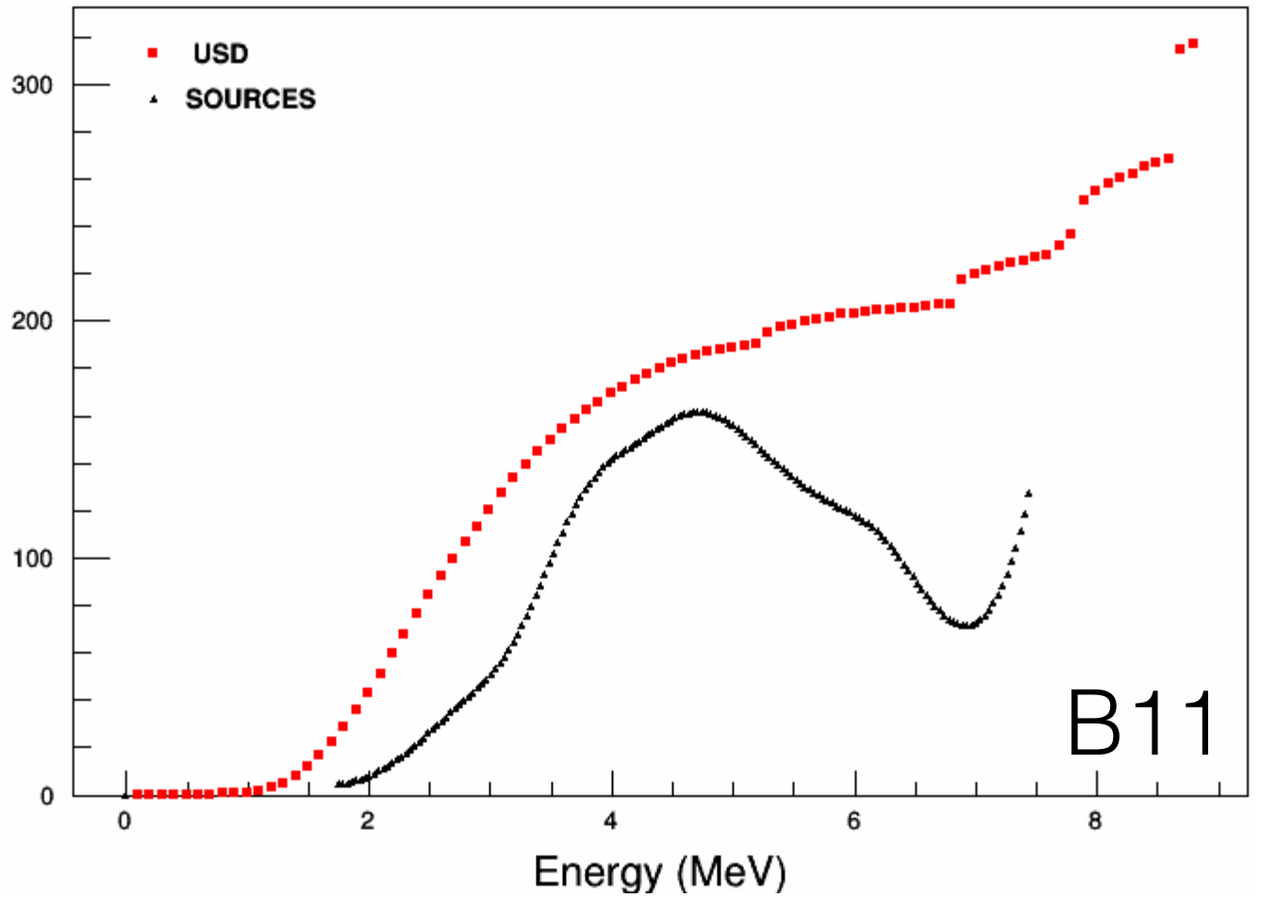
- http://www.physics.smu.edu/cooley/aarm/webpage.html
  TENDL vs SOURCES4 comparison already done

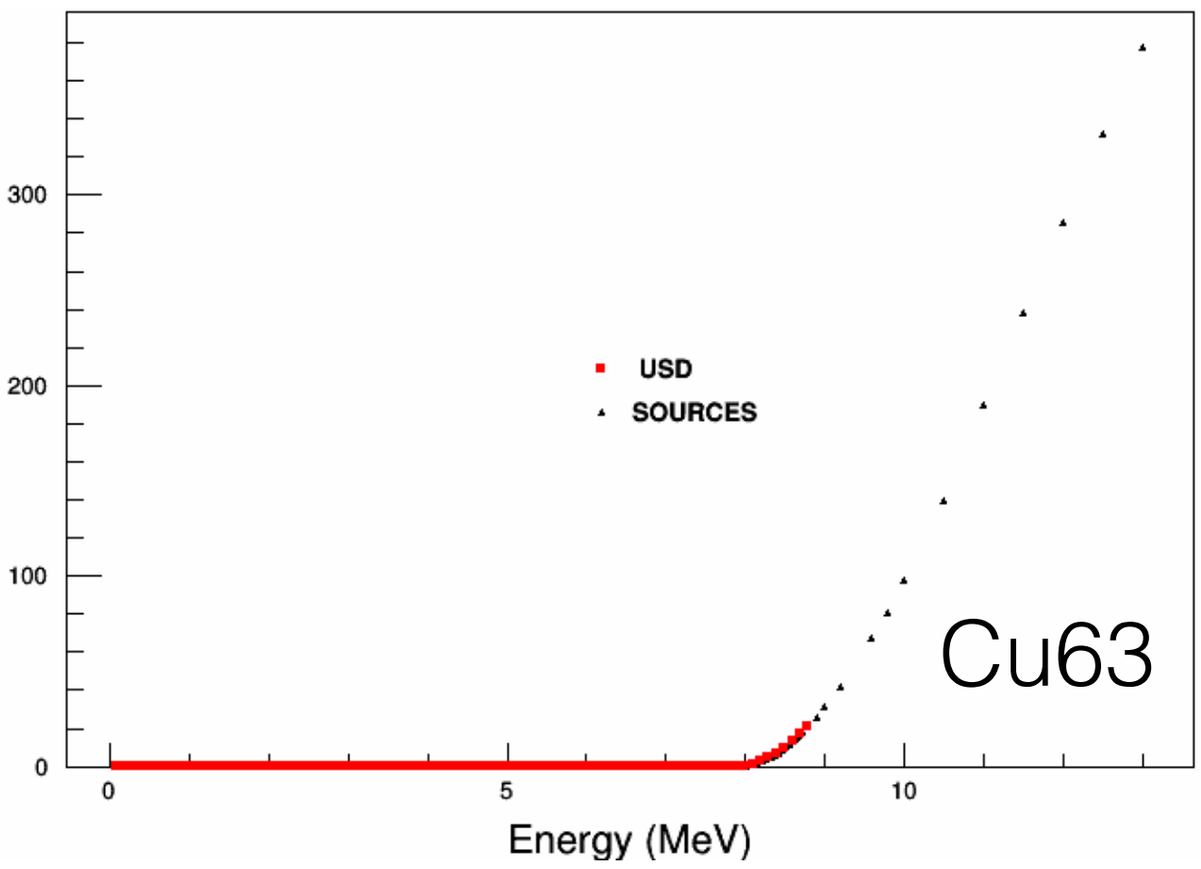
Doubts

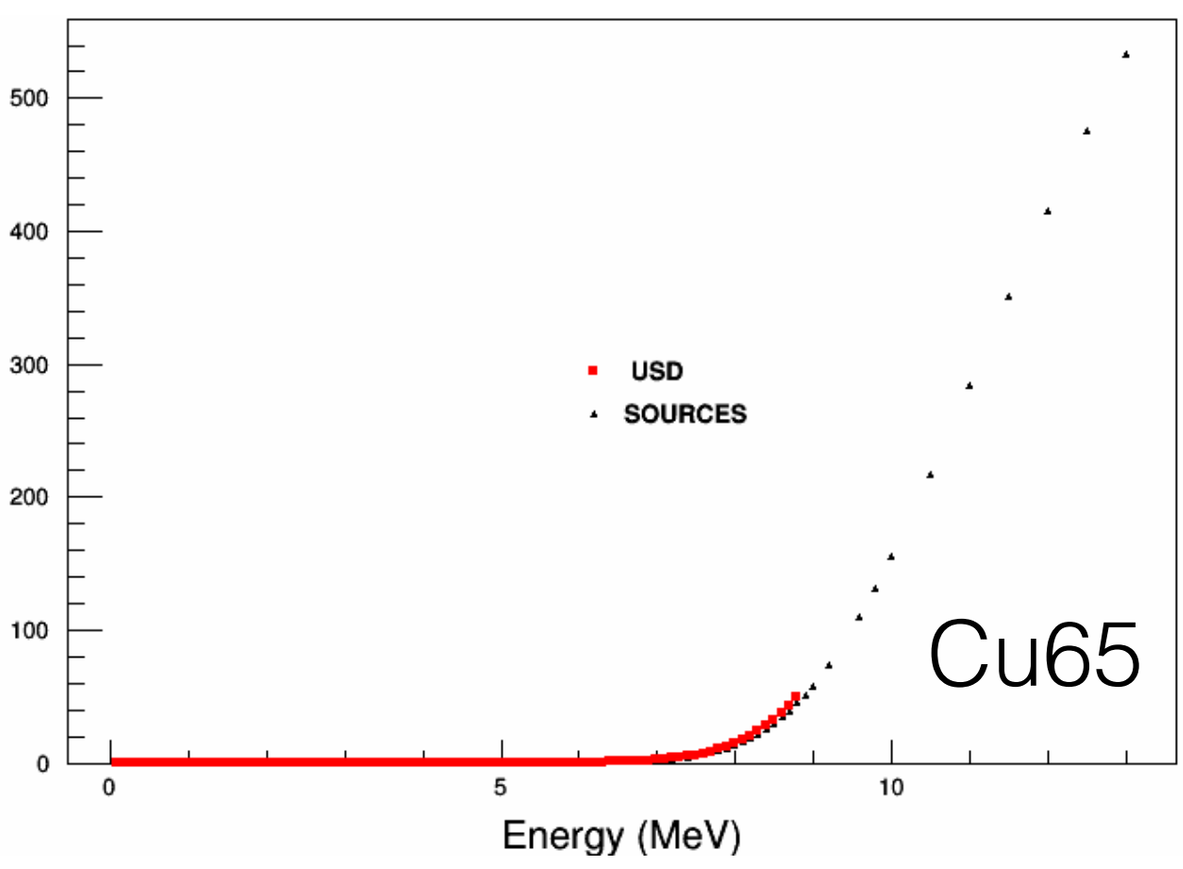
- Cr54, Fe58 available in USD?
  nprod.tot.054 refers to Fe54
  nprod.tot.058 refers to Ni58

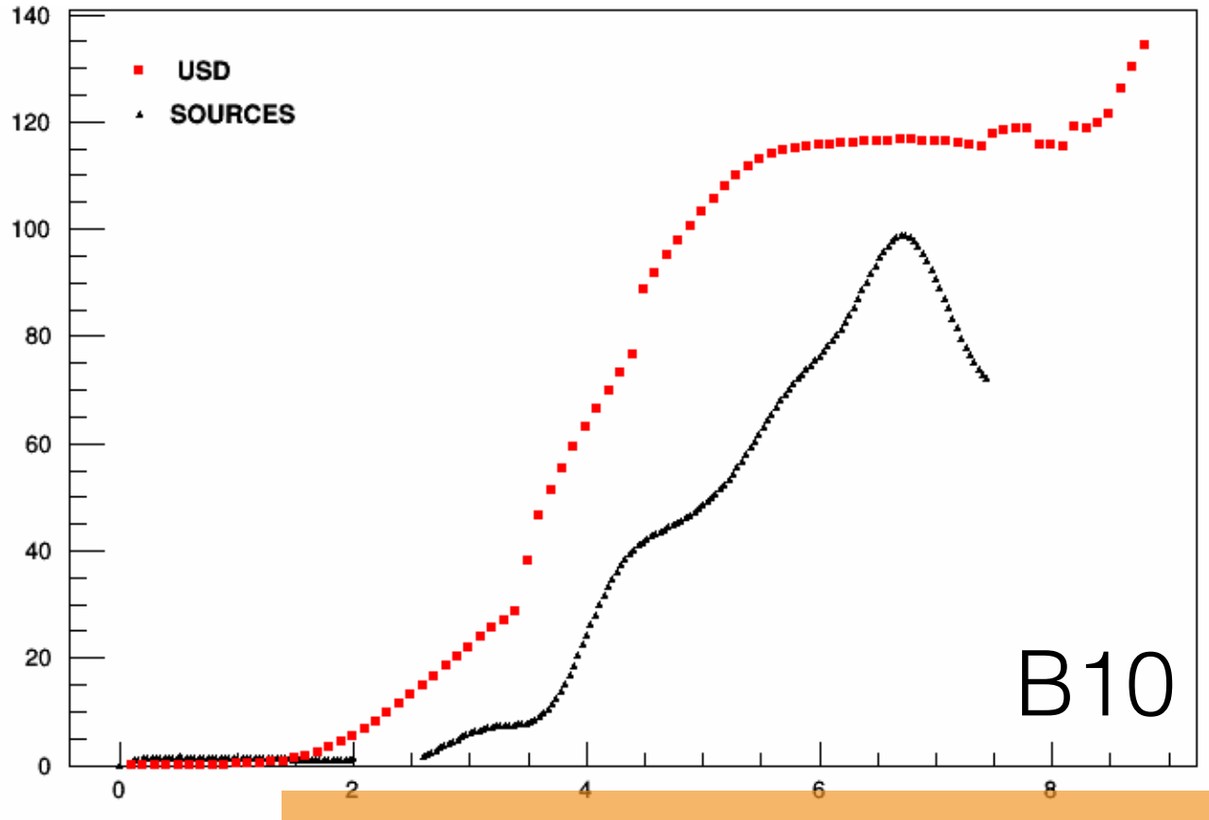
- What isotopes does USD use as alpha target?

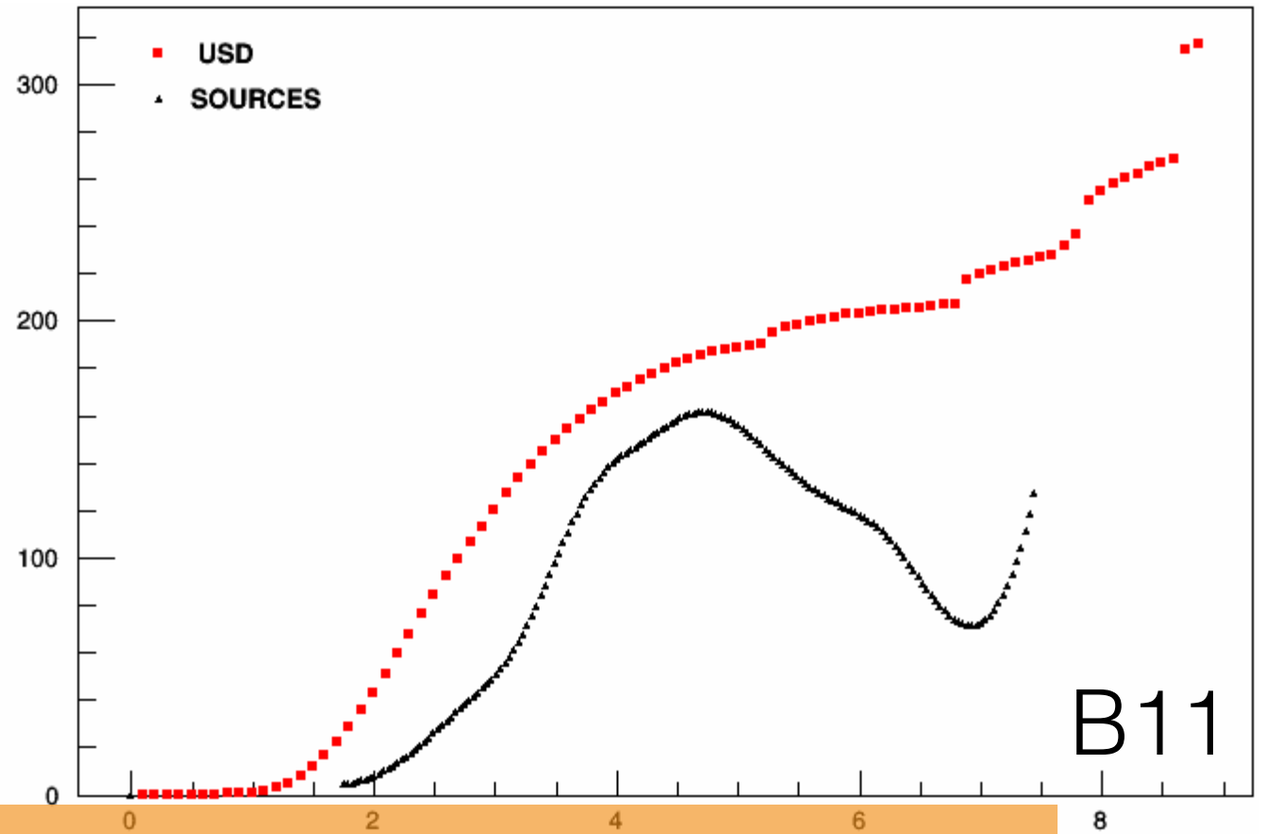

USD
SOURCES
B10
Energy (MeV)


USD
SOURCES
B11
Energy (MeV)

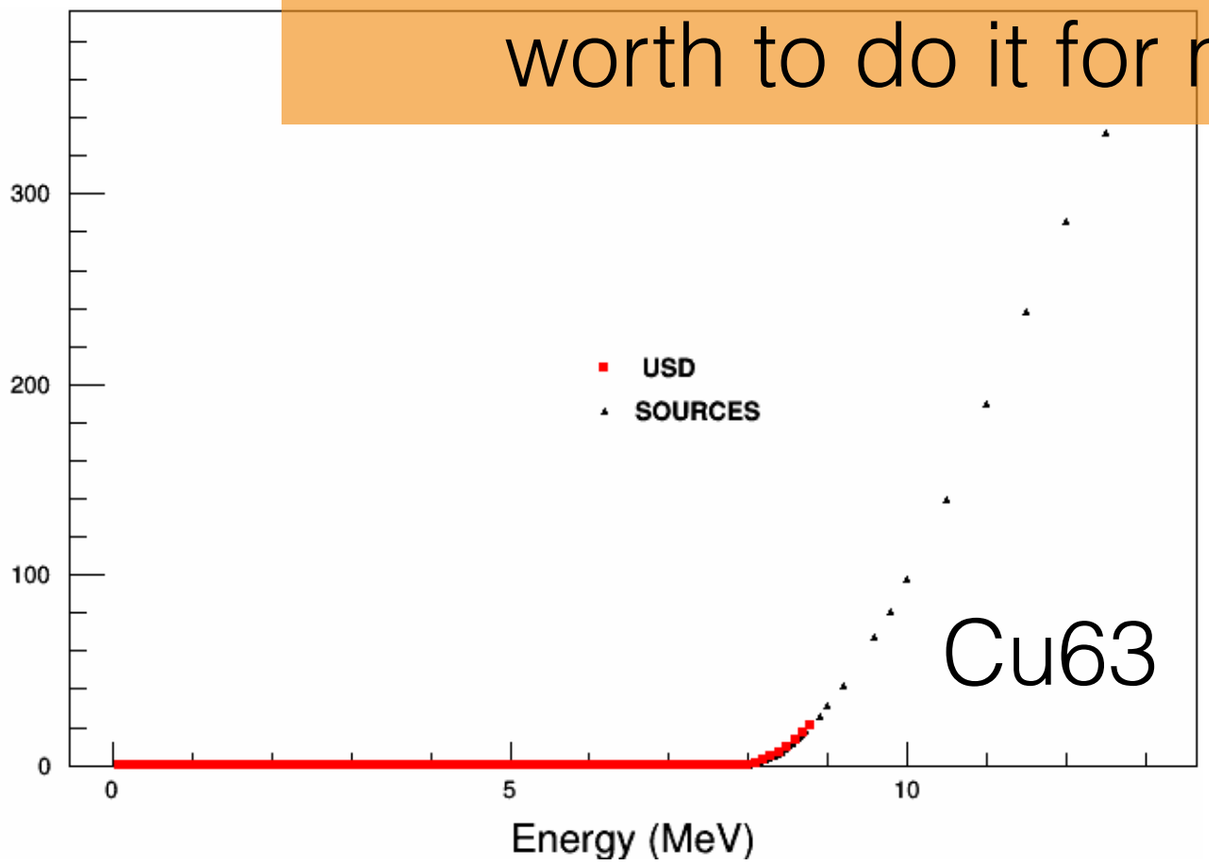

USD
SOURCES
Cu63
Energy (MeV)

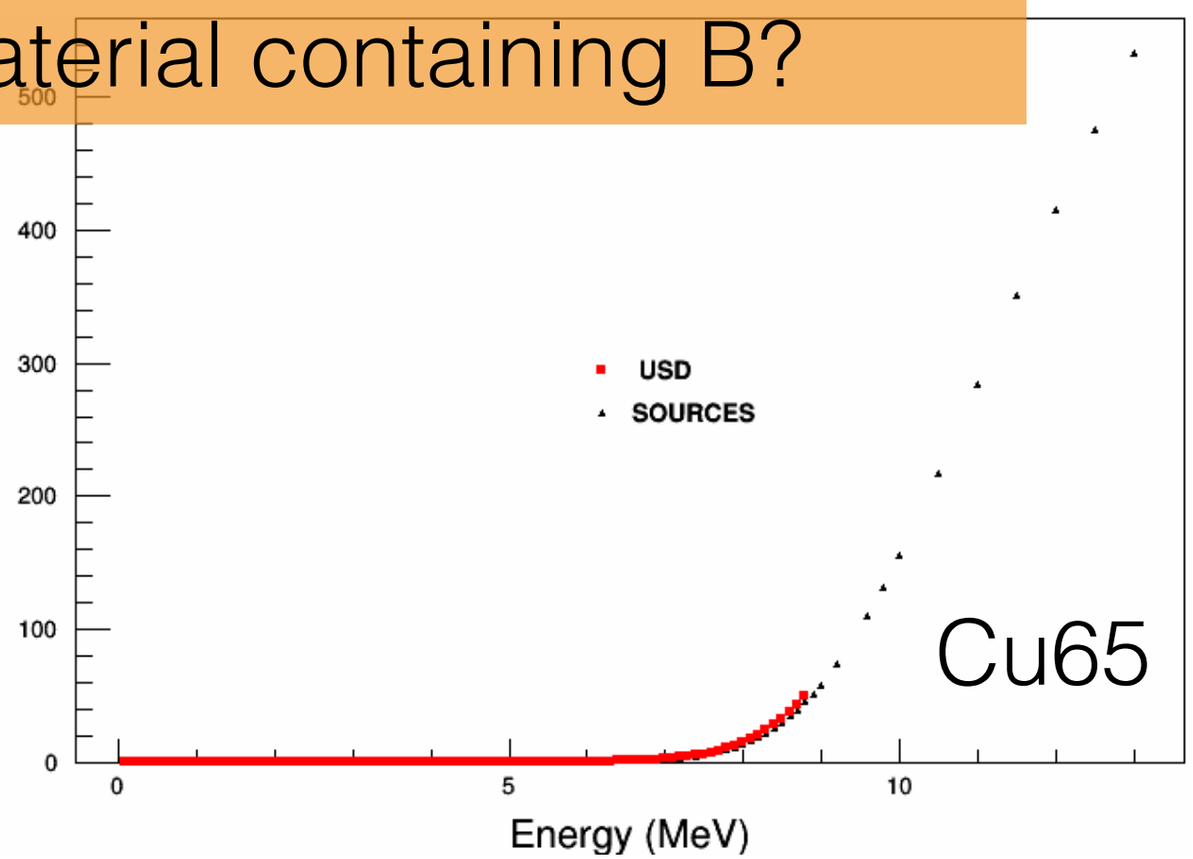

USD
SOURCES
Cu65
Energy (MeV)

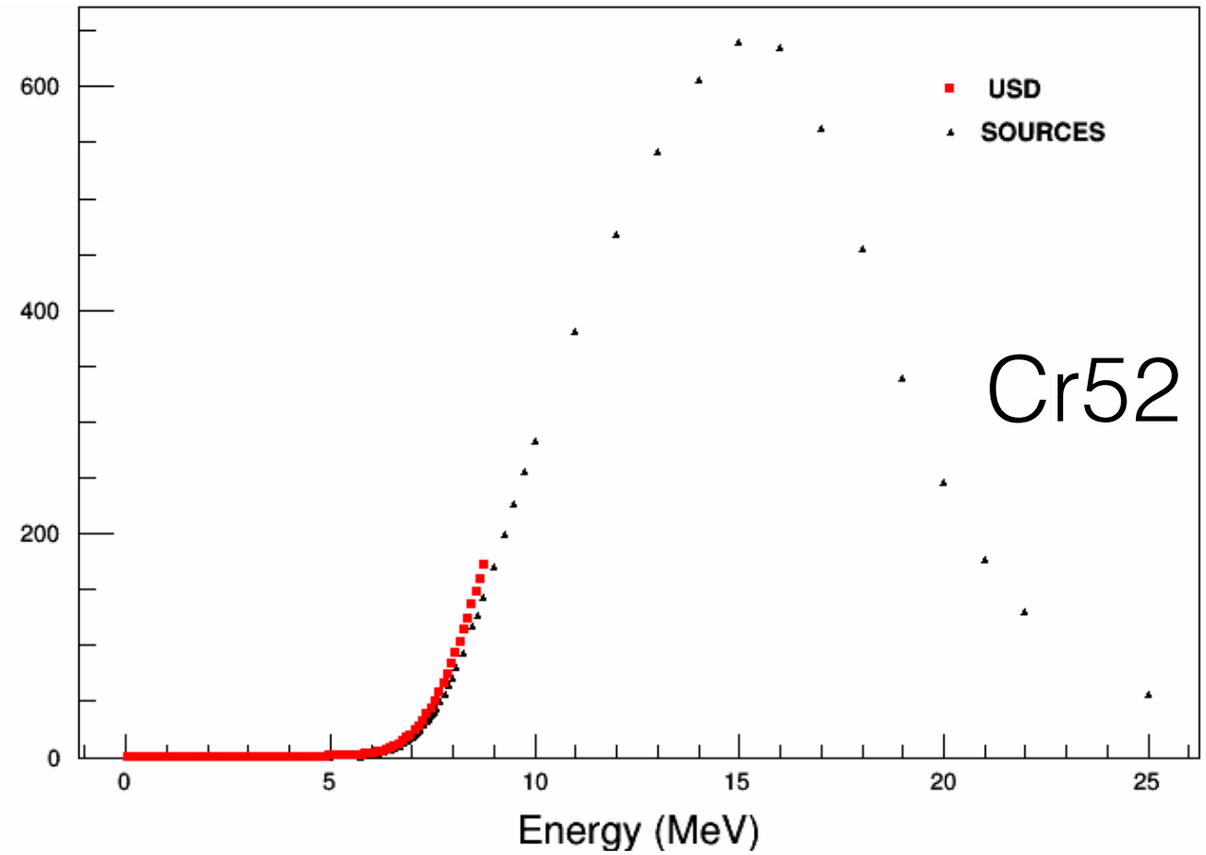


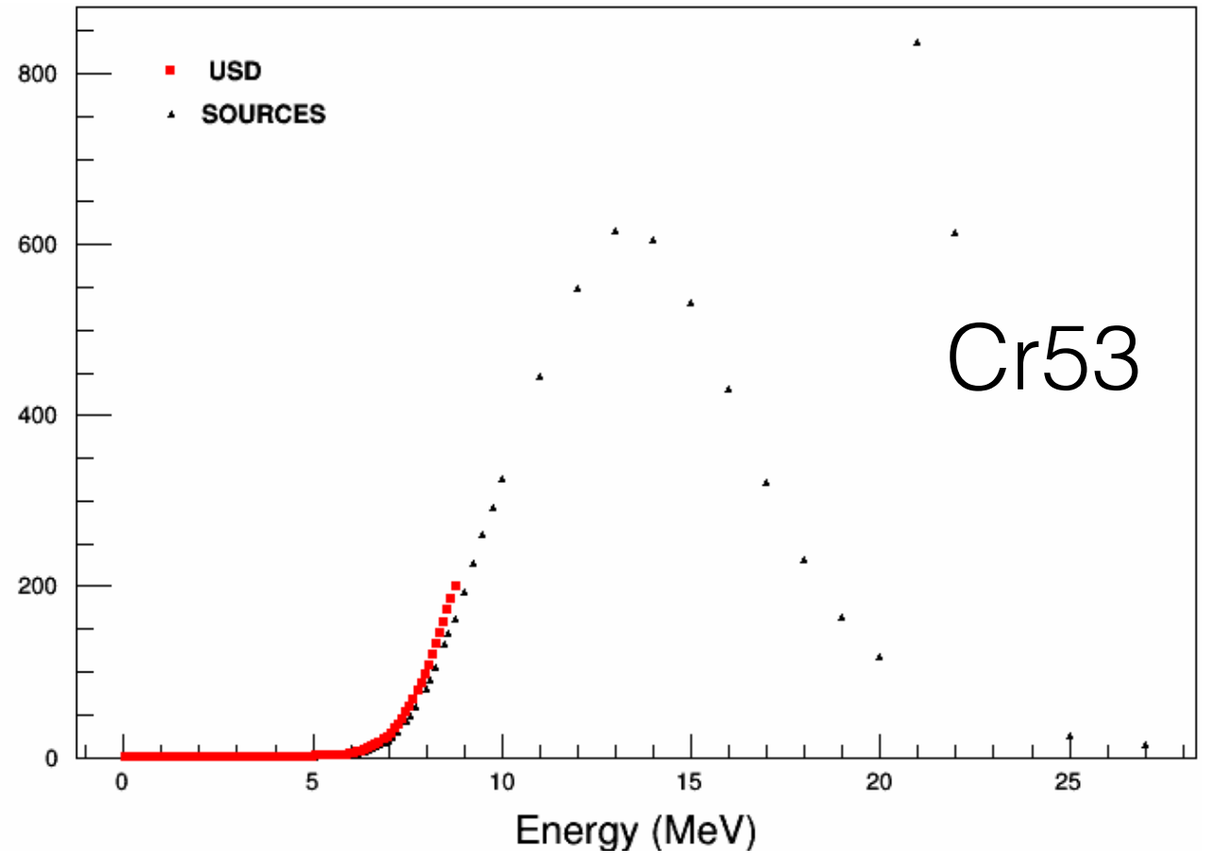


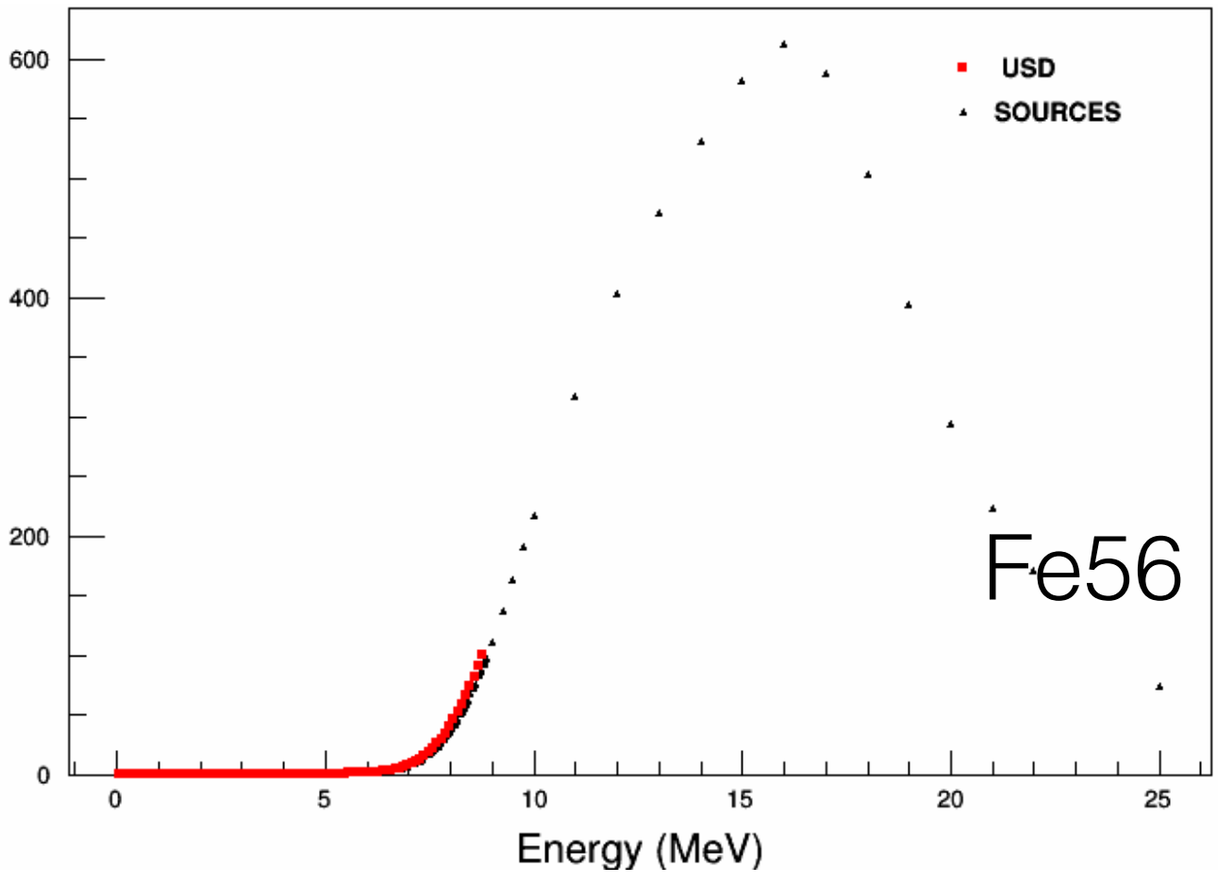
We have done cross check with Cu, would it be worth to do it for material containing B?

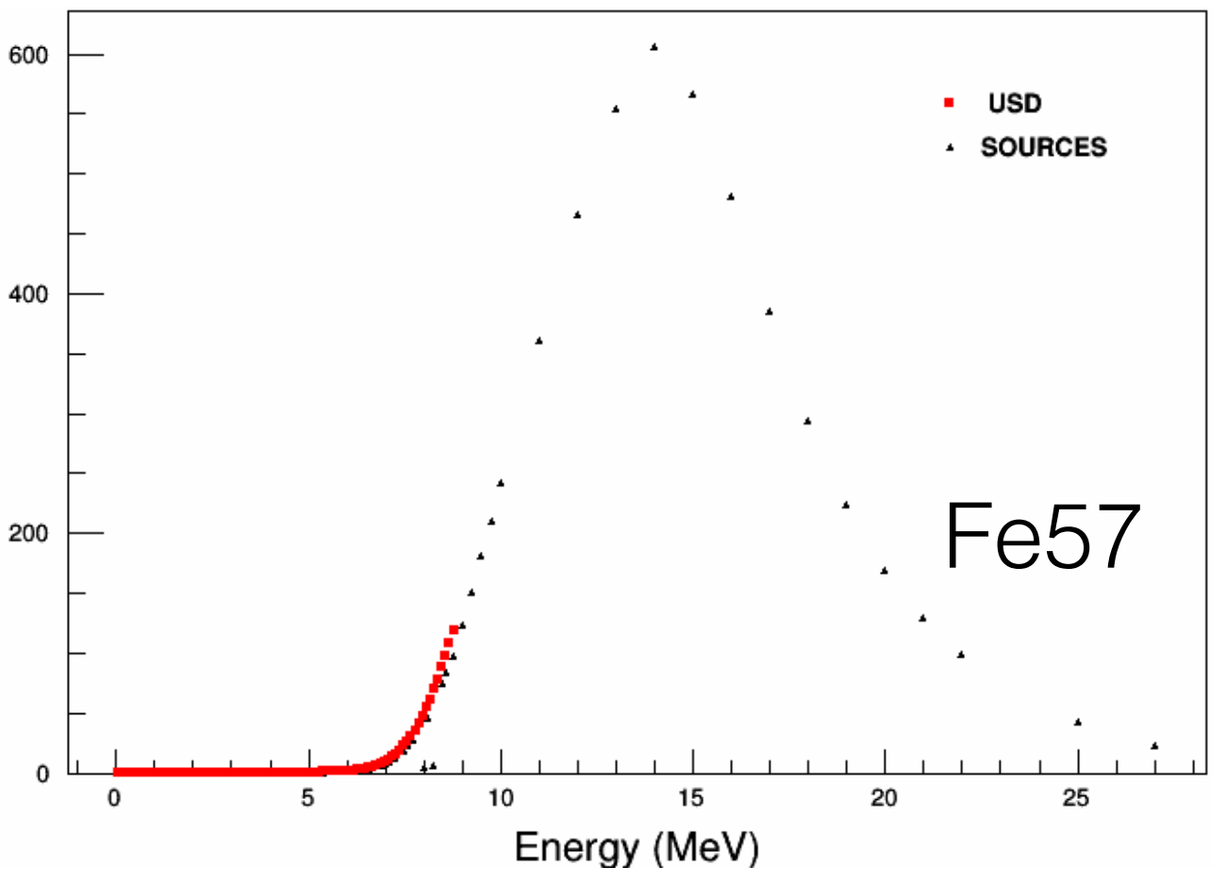


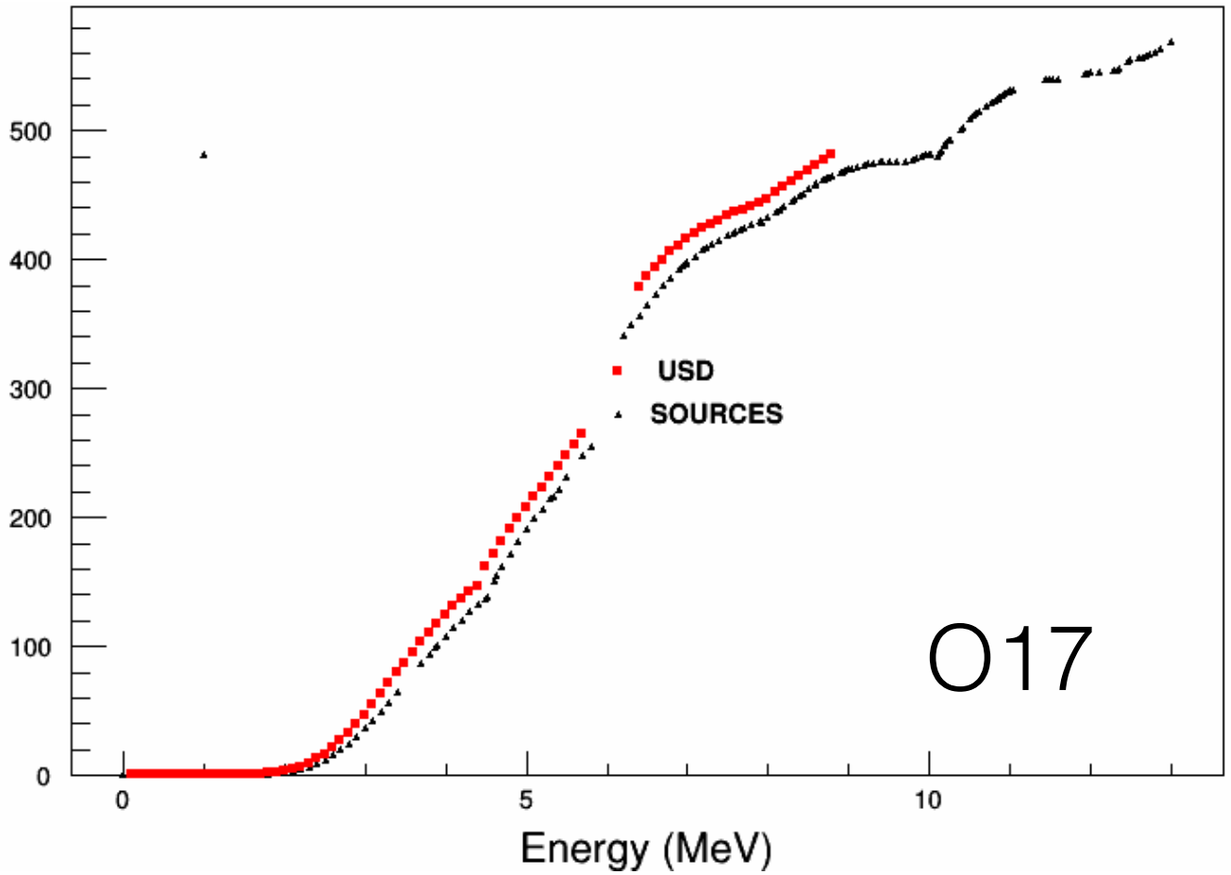


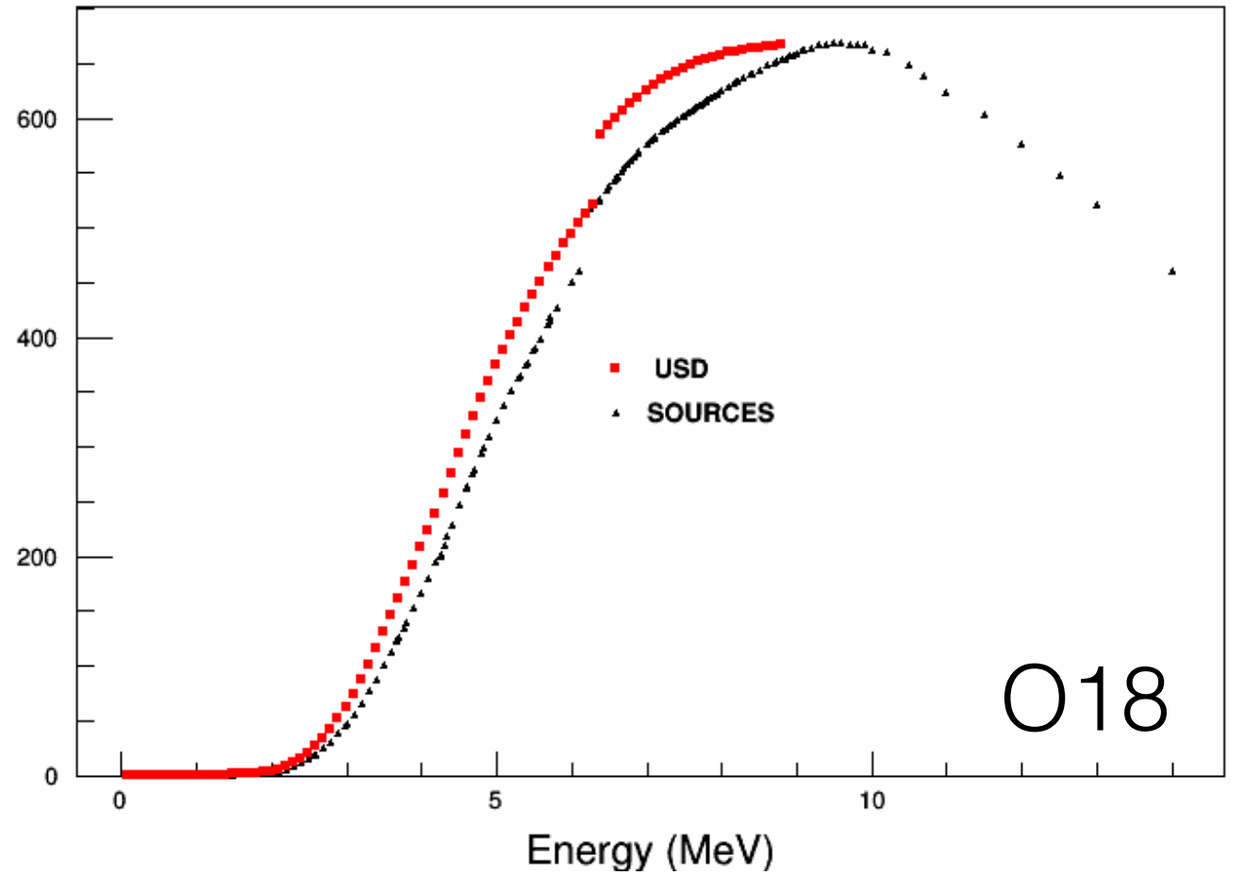

USD
SOURCES
Cr52
Energy (MeV)

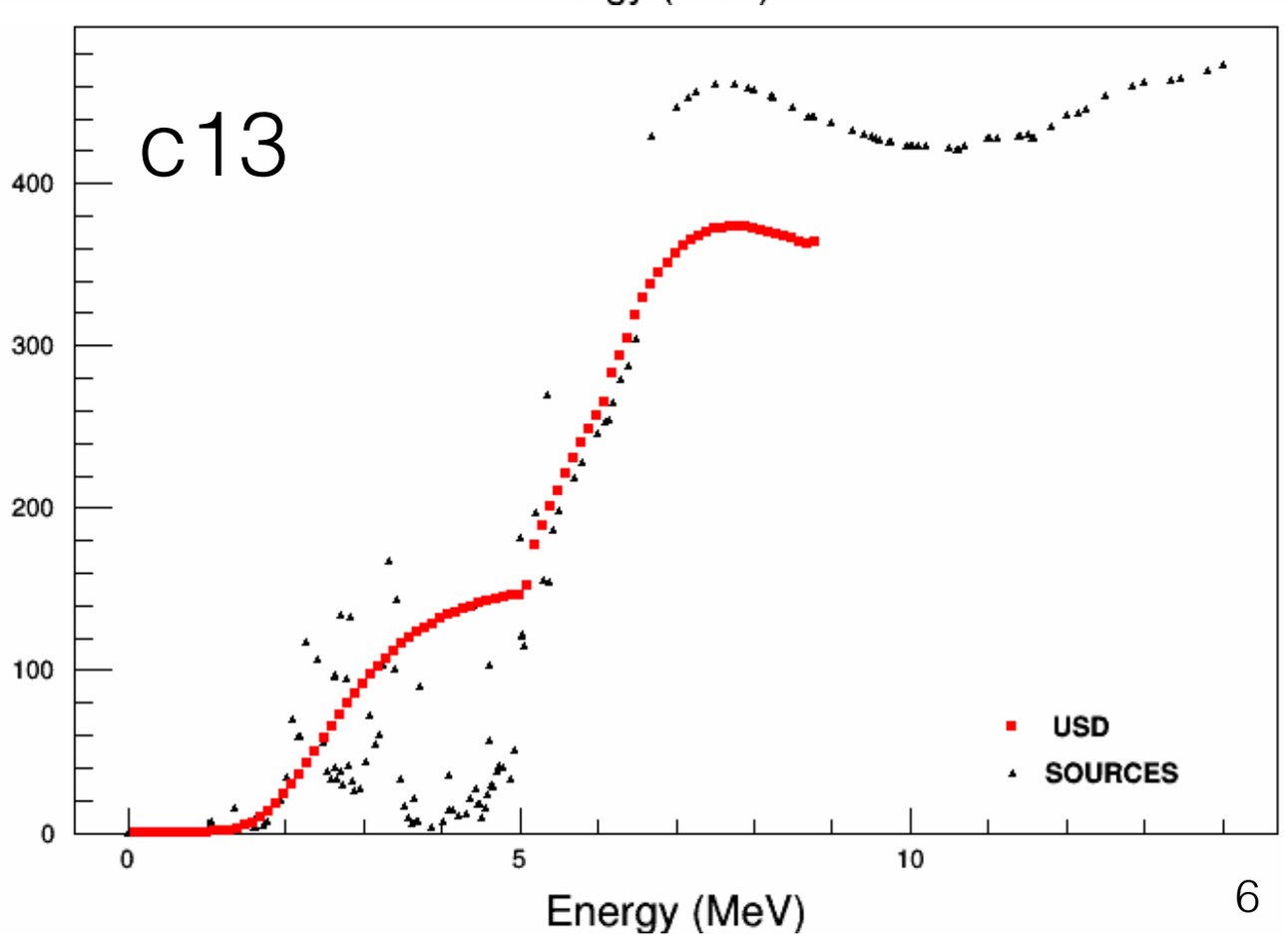

USD
SOURCES
Cr53
Energy (MeV)


USD
SOURCES
Fe56
Energy (MeV)


USD
SOURCES
Fe57
Energy (MeV)







C13_SOURCES4:
ba73b fig. 3 13c(a,n) x sec + EMPIRE2.19

SOURCES spectra

- ^{238}U 100% abundance spectra have been calculated and synced to usdneutronyield/SOURCES4_U238spectra/ on dropbox (not plot yet…)

- Ti corrected spectra have been uploaded both fro Unat and U238

- Cu spectra uploaded both for Unat and U238

ongoing …

- (alpha,n) USDvsSOURCES spectra to be produced
- Finishing with cross section comparison (missing material, additional cross check “USD into Sources4 code” for C13 and B10-11)
- Teflon still to be calculated …
- Anything else?