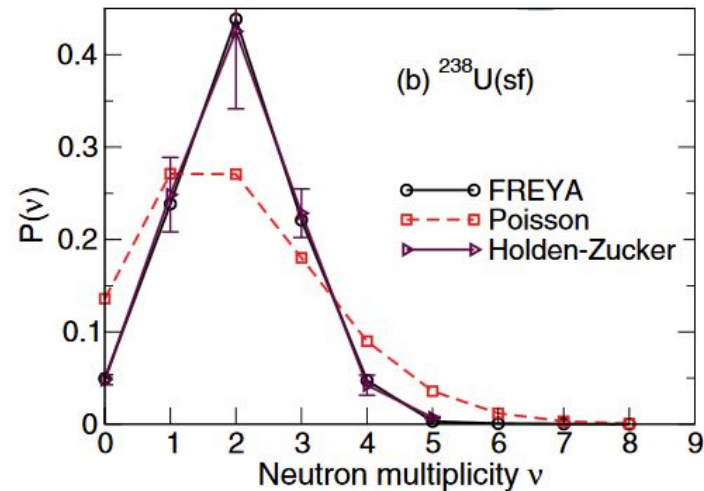
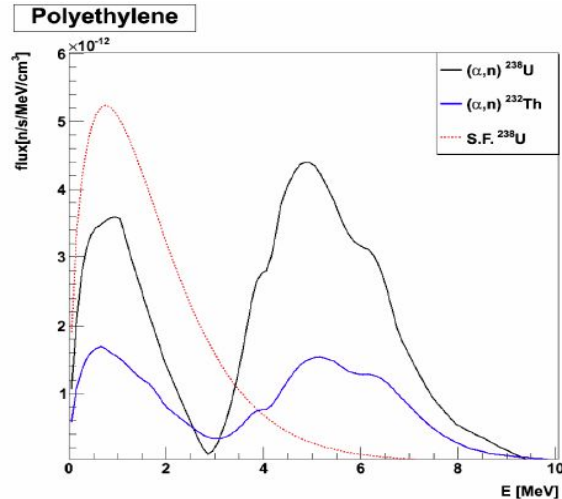


Fission neutrons: General aspects

- Neutrons produced by the U-238 spontaneous fission in the detector materials
- U-238 contamination measured by ICPMS. Material composition not relevant for the bkg calculation (only contamination and MC needed)
- This bkg should be subdominant with respect to the (α,n) neutrons:



- ...although the SF neutron yield can be higher than (α,n) in specific materials (high Z)!

Fission neutrons: Current status, results and plans

- None has been extensively working on this topic
- Ludovico (CIEMAT) took this task last week
- G4DS simulations will start soon (1 week)

- Current very preliminary estimate (based on the (α,n) - MC inefficiencies) :
0.011 NR after cuts in 200 t·y
- It can be considered as an upper limit, although special cases (high U-238 concentration in high Z materials) should be evaluated