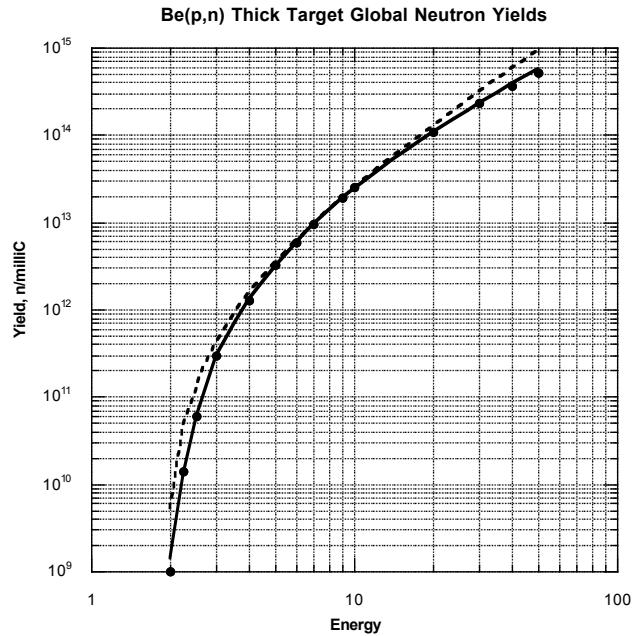


[Be(p,n)]

(Chapter 2.1.3 in *Elements*)

Good fit to Be(p,n) neutron yield data



Global neutron yields for protons on thick targets of Be (Lone 2007). Points, Lone data. Solid line, Eq. (1). Dashed line, Nann's fit [In Elements, Eq. (2.4), (Lavelle et al. 2007)].

A fit to the Be(p,n) data good to about 10%, is

$$Y(E_p) = 1.024 \times 10^7 (E_p)^{14.59} \frac{\exp\left(-\left(\frac{6.59}{E_p}\right)\right)}{\left(1 + \left(\frac{E_p}{2.426}\right)^{12.94}\right)} \quad \text{neutrons per millicoulomb,} \quad (1)$$

where the proton energy E_p is in mega-eV.