



Range of  $t_{1/2}$ :

16.3  $\mu\text{s}$ ,  $^{214}\text{Po}_{84}$  (most energetic  $\alpha$ , also)  
 $4.46 \times 10^9 \text{y}$ ,  $^{238}\text{U}$  (least energetic  $\alpha$ , also)

Range of  $\beta$  energy:

0.017 MeV,  $^{210}\text{Pb}_{82}$   
 3.27 MeV,  $^{214}\text{Bi}_{83}$

Range of neutrons/protons:

1-500 ( $^{126}/84$ ),  $^{210}\text{Pb}_{84}$   
 1-512 ( $^{124}/82$ ),  $^{206}\text{Pb}_{82}$  (stable)  
 1-610 ( $^{132}/82$ ),  $^{214}\text{Pb}_{82}$