Lifetime of Muonic Atom for Different Materials 10⁴ Capture Decay 10³ Total 10² Lifetimes (μs) **Fitanium** Copper Gold-Lead⁴ <u>|ron-</u> 10¹ 10⁰ Approx. COMET Beam Flash Duration Aluminium Carbon-10⁻¹ 10⁻² 10 20 30 40 50 60 70 80

Atomic Number, Z