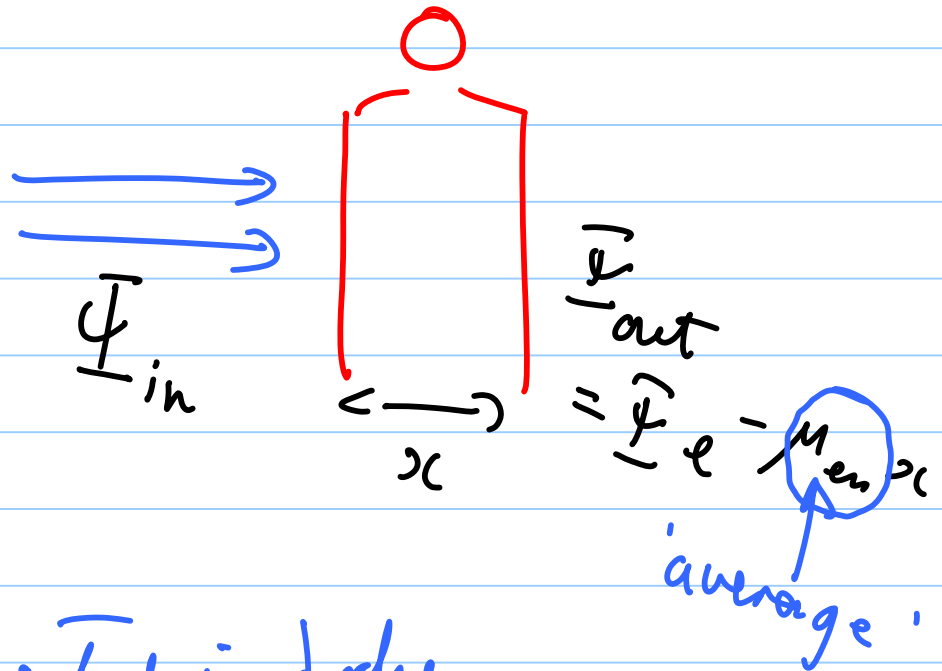


PHY138Y: Physics for the Life Sciences - Spring 2008
Nuclear and Radiation - Lecture 13

Dose in body



Dose?

Energy / m² deposited in body

$$= \bar{\Psi}_{in} - \bar{\Psi}_{out}$$

$$\text{Dose} = \left(\frac{M_{en}}{f} \right) \bar{\Psi} \therefore \underline{D} = \left(\frac{M_{en}}{f} \right) (\bar{\Psi}_{in} - \bar{\Psi}_{out})$$

$$\Rightarrow \underline{D}_{in} - D_{out} \neq \bar{D}_{avg}$$

See Slides for the correct method!