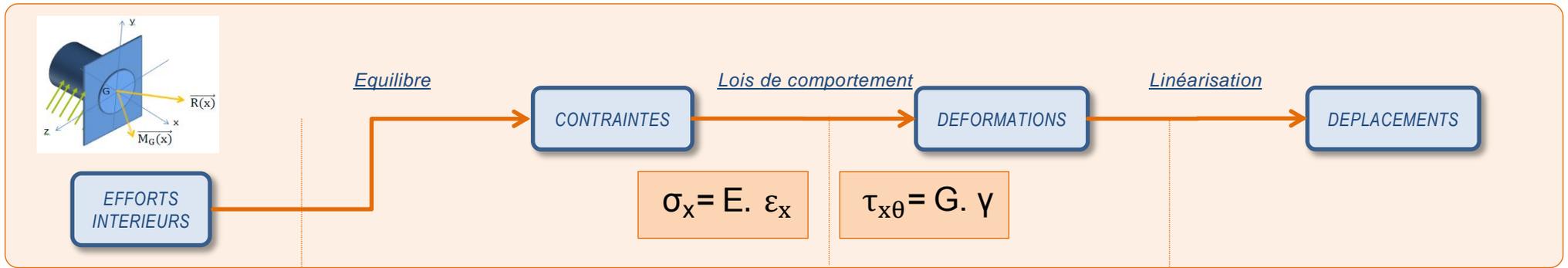
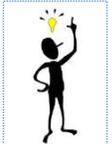
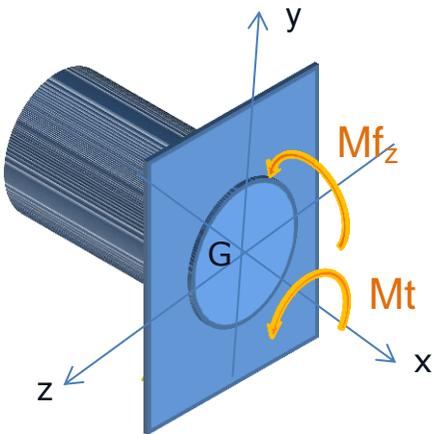


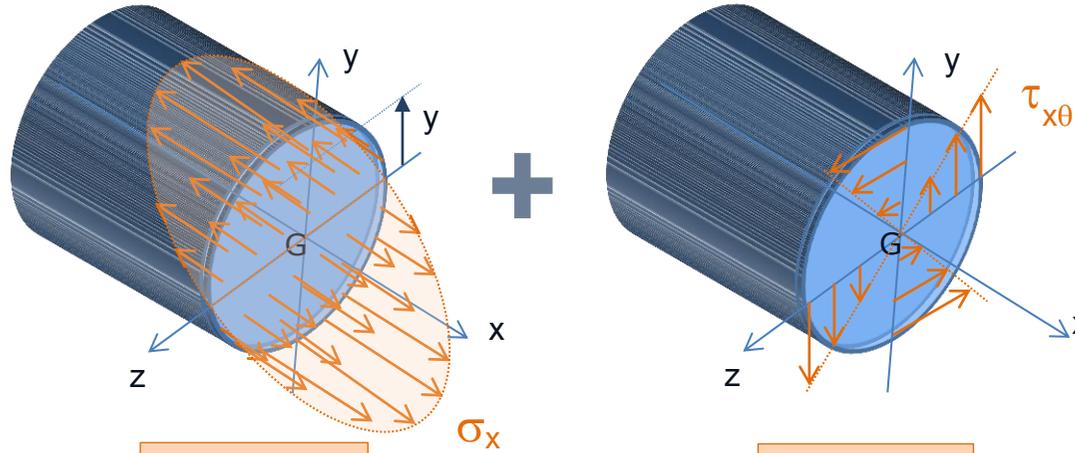
Synthèse – FLEXION-TORSION



$$\{T_{int}\} = \begin{pmatrix} 0 & Mt \\ 0 & 0 \\ 0 & Mf_z \end{pmatrix}_G$$



Uniquement pour les sections circulaires



$$\sigma_x = \frac{-Mf_z}{I_{Gz}} \cdot y$$

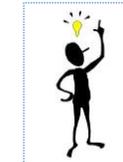
contrainte normale

$$\tau_{x\theta} = \frac{Mt}{I_{Gx}} \cdot r$$

contrainte tangentielle

$$\vec{C}_{M,\vec{x}} = \sigma_x \cdot \vec{X} + \tau_{x\theta} \cdot \vec{e}_\theta$$

On superpose les déformations de flexion et les déformations de torsion



Les déformations dues à l'effort tranchant sont négligeables