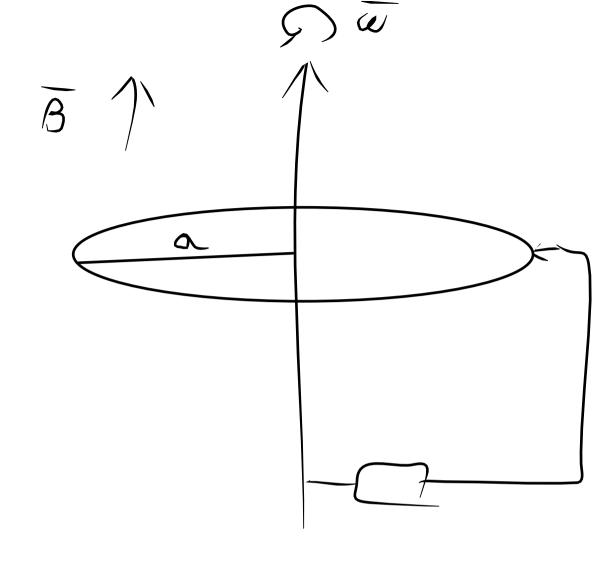


$$E_{rd} = \int f \cdot dl$$



$$P = \frac{\vec{F}}{\Psi} = \frac{\psi \vec{x} \vec{B}}{\Psi} = \nabla x \vec{B} = \omega p \vec{B} \hat{e}_{\psi} \times \hat{e}_{z} = \omega p \vec{B} \hat{e}_{z}$$

$$\mathcal{E}_{TNJ} = \int w \beta \hat{e}_{r} d\rho = \frac{w \beta \hat{a}}{2}$$

$$T = \frac{w}{R} = \frac{4 \beta \hat{a}^{2}}{2R}$$