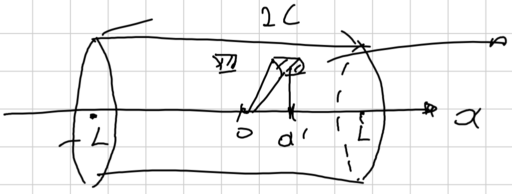
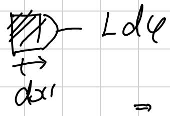


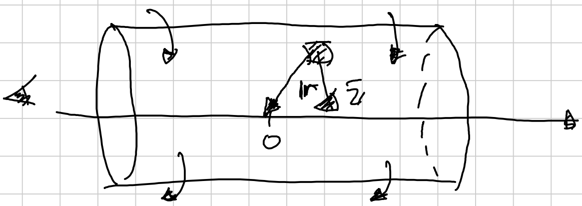
Lωt

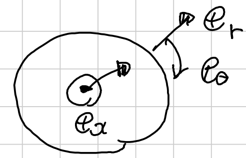


$\Rightarrow I = qv = \sigma \cdot L\,dx'\,d\varphi \cdot L\omega$

$\therefore \sigma L^2 \cdot dx' \cdot d\varphi$

$\therefore \; I = \int_0^{2\pi}\int_{-L}^{L} \sigma L^2\, dx'\, d\varphi = 2\pi \sigma L^2 \cdot (2L) \cdot \; = 4\pi L^3 \cdot \sigma$ //





で、極座標の分析をする

$\frac{1}{4\pi\mu_0} \cdot \frac{1}{L^2} \cdot$