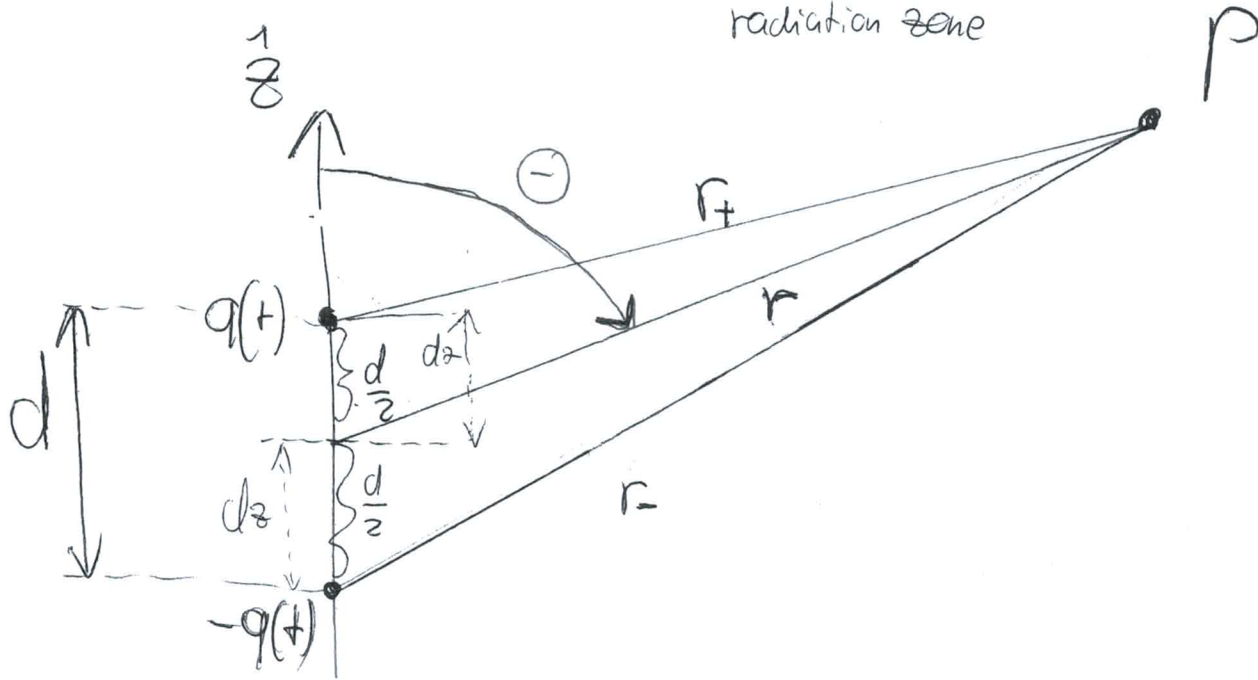


Vector Potential \vec{A} in $d \ll \frac{u}{c} = \frac{\lambda}{2\pi} \ll r$

(1)



$$d \ll \frac{c}{u} = \frac{\lambda}{2\pi} \ll r$$

$$\vec{J}(t) = \frac{dq(t)}{dt} \hat{z} = \frac{d}{dt} q_0 \cos(\omega t) \hat{z} = -q_0 \omega \sin(\omega t) \hat{z}$$

differential current along \hat{z}

only $+q(t)$ to keep things simple

avoid phase problems

