

$$\begin{aligned}
 j^+(t) &= q^-(t) \dot{q}^+(t) = (x\dot{x} + y\dot{y}) + i(x\dot{y} - y\dot{x}) \\
 &= \frac{d}{dt} \frac{1}{1 - i\mathbf{cn}(t)}
 \end{aligned}$$