

Practice Problems Related to Retarded Potentials and Radiation

1. The Poynting flux is $\mathbf{S} = \frac{c}{4\pi} \mathbf{E} \times \mathbf{H}$. In a vacuum, so that $\mathbf{H} = \mathbf{B}$, and assuming a slowly moving source, derive the Larmor power formula by integrating the Poynting flux over all directions.