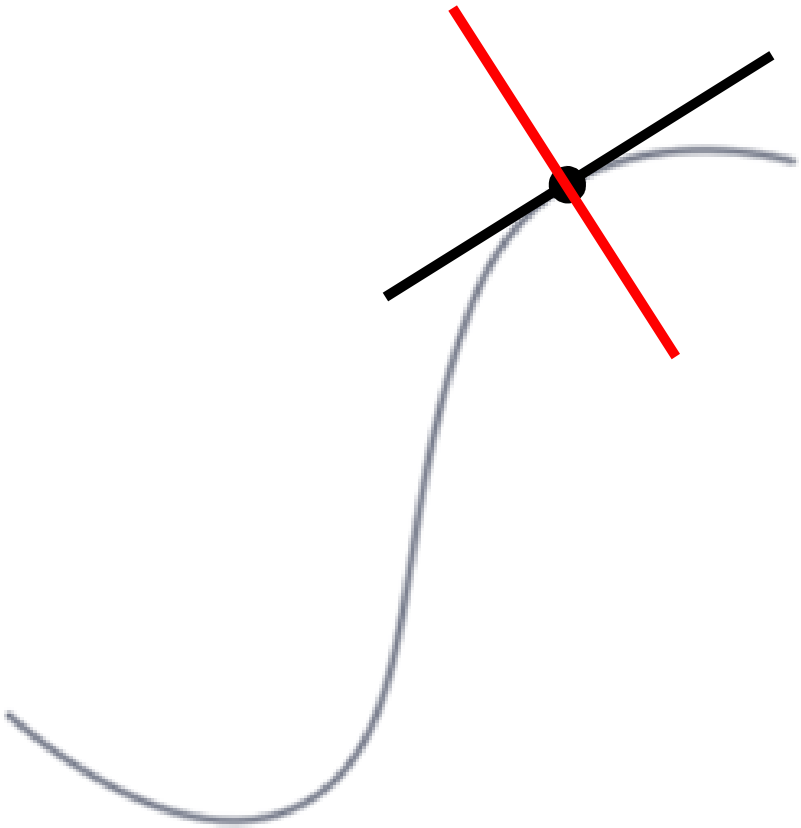
A point charge is moving along the following trajectory (left to right) with constant speed:



How would you characterize the particle's radiation?

A) Strong along the red axis, weak along the black axis
B) Strong along both axes
C) Weak along the red axis, strong along the black axis
D) Weak along both axes

The Poynting vector associated with radiative monopole fields went like $\frac{1}{r^2}$. Could it ever go like $\frac{1}{r}$? Be prepared to explain why or why not.

A. It can go like $\frac{1}{r}$, and I can explain why.

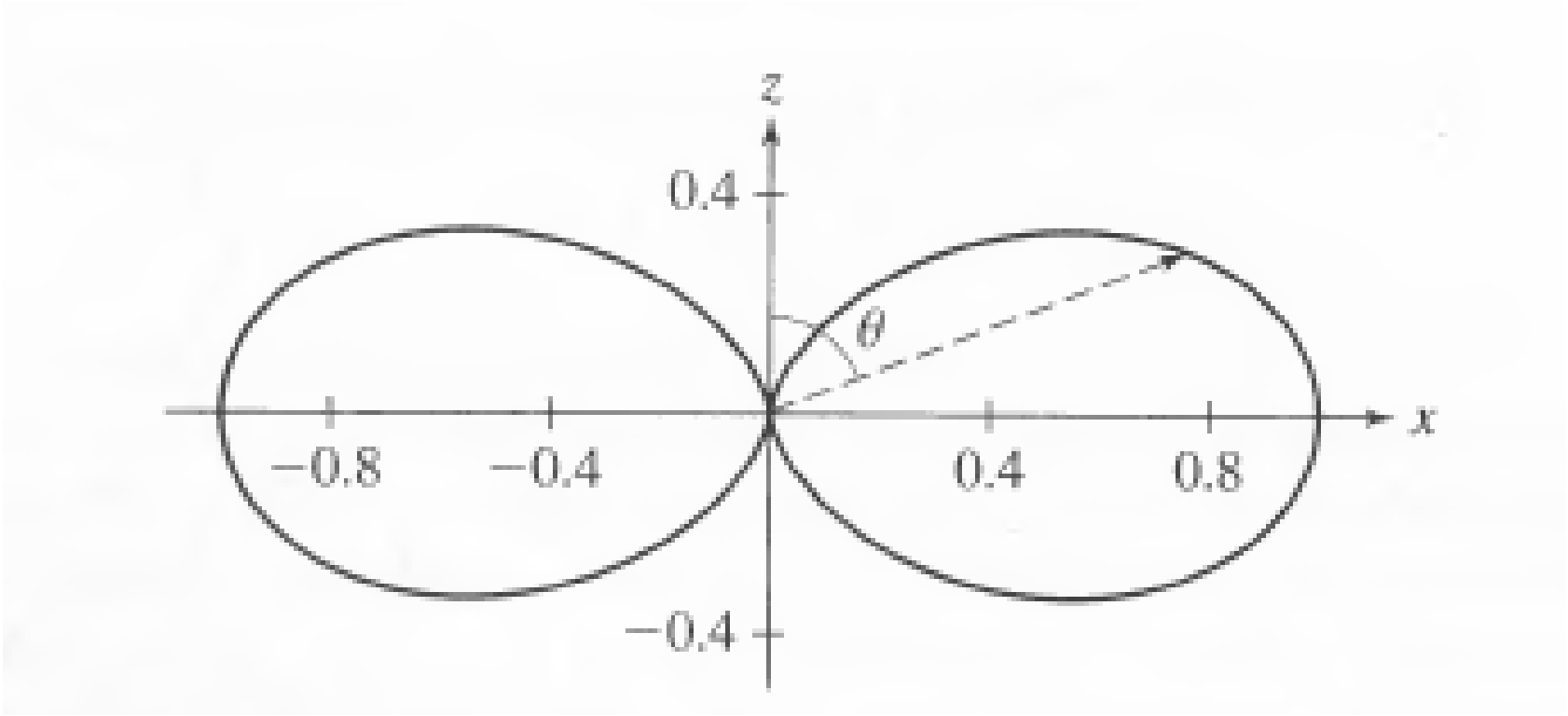
B. It seems like it ought to be able to go like $\frac{1}{r}$, but I can't explain it.

C. It seems like it oughtn't to be able to go like $\frac{1}{r}$, but I can't explain it.

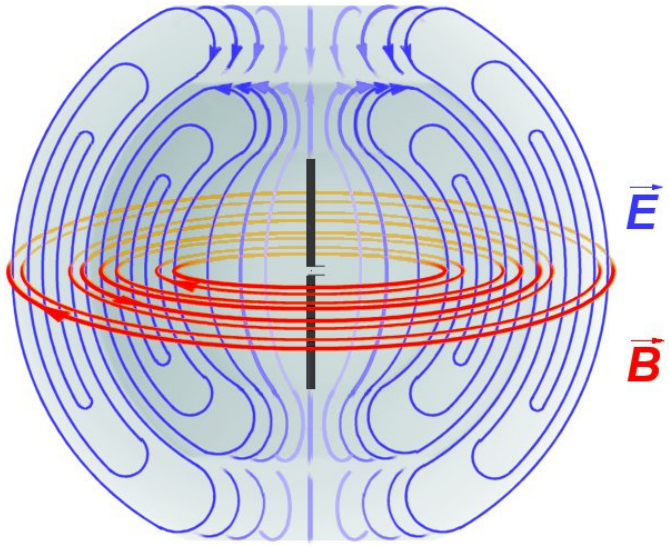
D. It can't go like $\frac{1}{r}$, and I can explain why.

E. Pants

Dipole radiation intensity

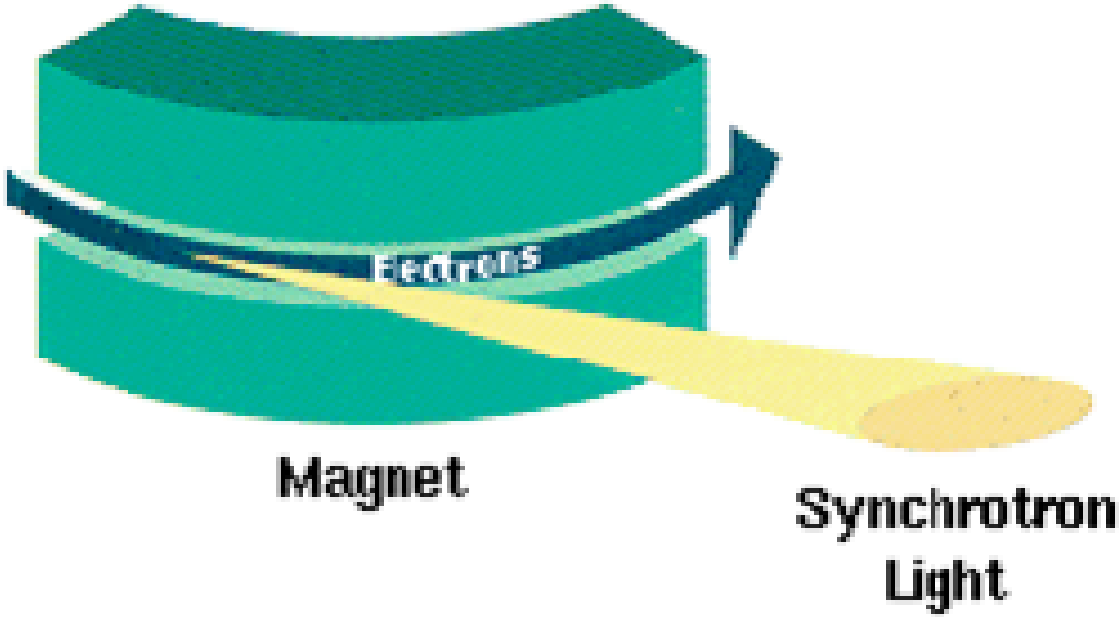


Antennas



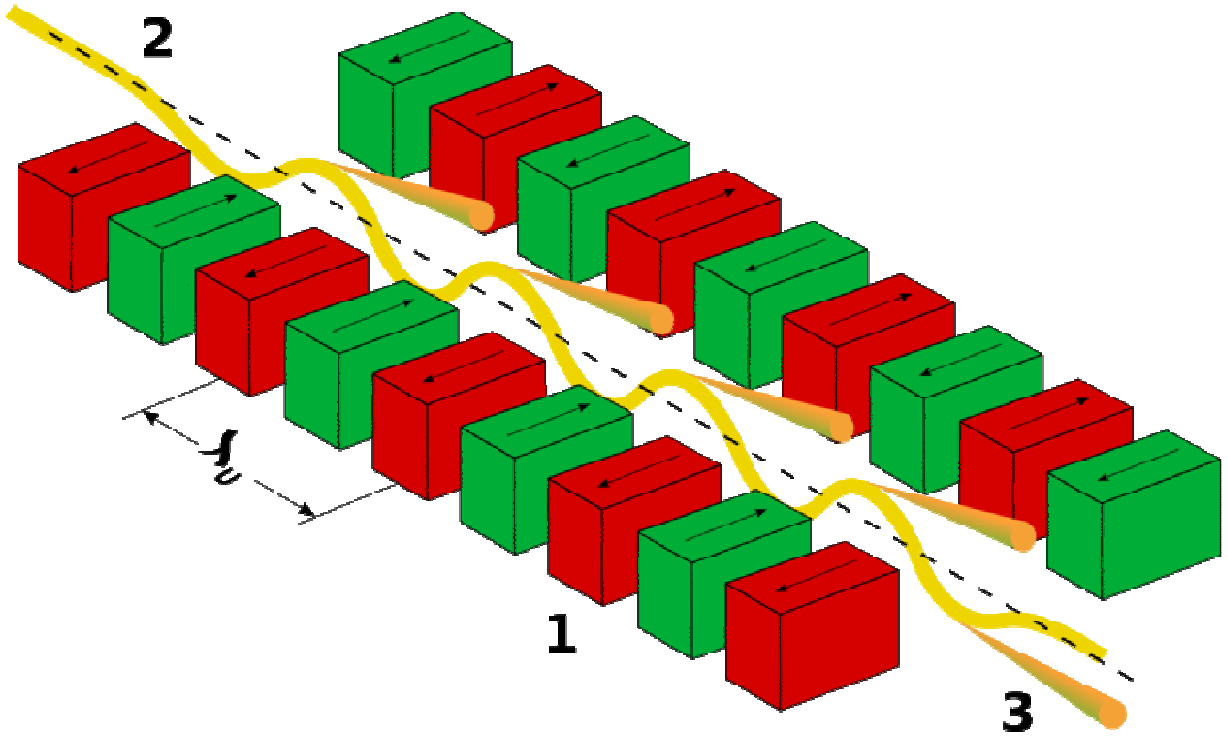
Radio, cell, wireless

Synchrotron radiation



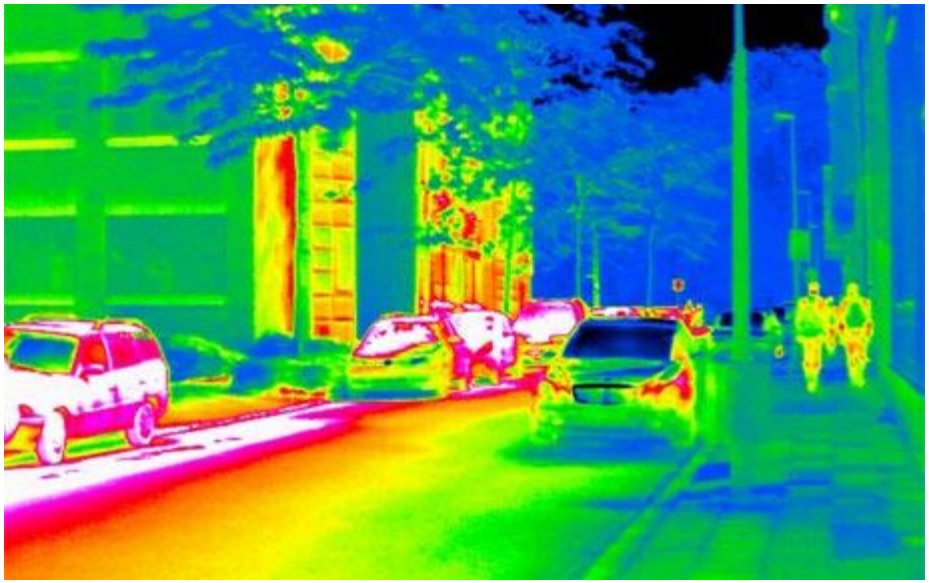
Production of high-energy radiation for medical (and other) applications

Synchrotron radiation



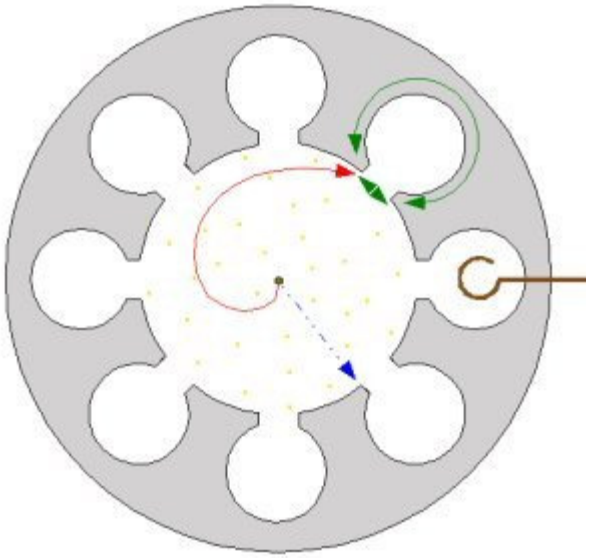
Production of high-energy radiation for medical (and other) applications

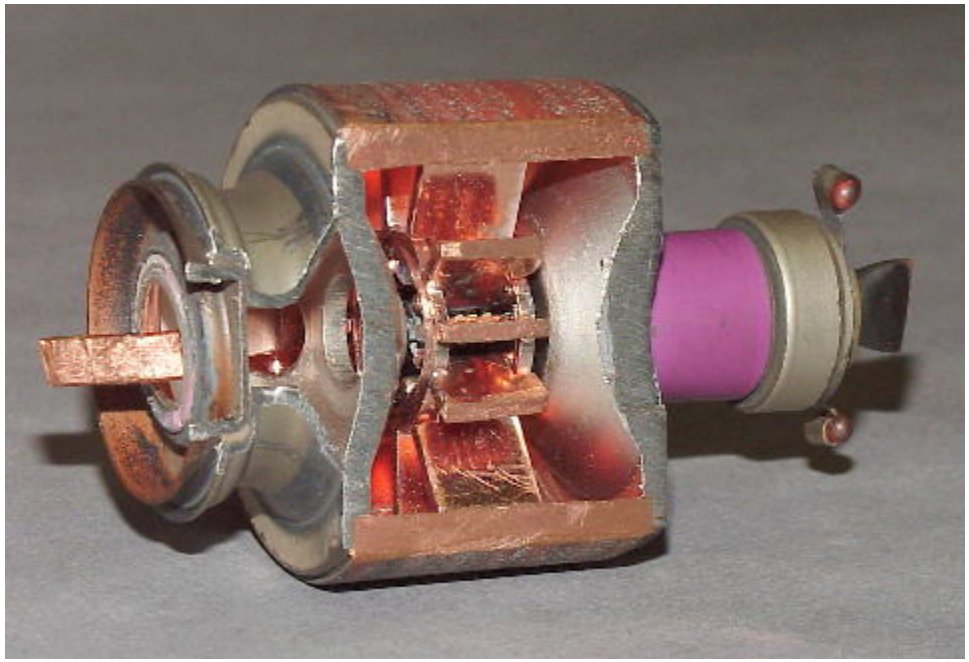
Thermal radiation



Heat associated with random motion of atoms

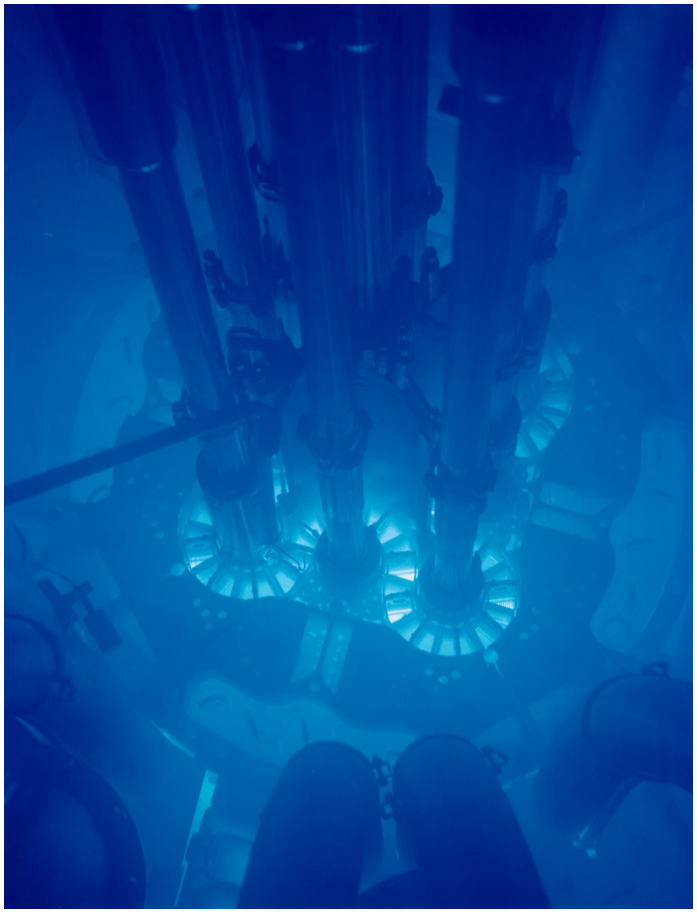
Magnetrons





Uses waveguide principles to govern radiation frequency

Cherenkov radiation



$v_{particle} > v_{phase,mat}$

Heat associated with random motion of atoms