

Prep guide – Coax cables

Big picture goal – Realize that coaxial cables are actually waveguides, and learn about basic TEM solutions for this geometry (fields, dispersion relation, and induced currents/charges).

1) How do the E and B TEM fields for a coax cable compare to plane wave fields?

2) How does the dispersion relation for TEM modes in a coax cable compare to the dispersion relation for plane waves in free space?