

PH 431 EM Capstone: Waveguide Project Groups

Your task is to describe and characterize waveguide modes. At the least, this should include equations and descriptions of the E and B fields in the waveguide and pictures, movies, models, or working devices to illustrate the mode. Also discuss the dispersion equation for the mode and present a graph.

Reference: Griffiths 9.5

Group 1: TE₁₀ Mode in Rectangular Waveguide

Tyler Backman, Mark Blanding, Scott Clark

Group 2: TE₁₁ Mode in Rectangular Waveguide

Abel Condrea, Scott Griffiths, Zachary Haines

Group 3: TE₂₀ Mode in Rectangular Waveguide

Drew Haven, Ramsi Hawkins, Doug Jacobsen

Group 4: TE₂₁ Mode in Rectangular Waveguide

Kimberly Johnson, Joseph Kinney, Casey Klierer

Group 5: TM₁₁ Mode in Rectangular Waveguide

Nicholas Kuhta, Ryan Lund, Patrick Waters

Group 6: TM₂₁ Mode in Rectangular Waveguide

Elizabeth Nystrom, Jason Stephens, Ken Takahashi

Group 7: TE₁₀ Mode in Circular Waveguide

Jeffrey Hazboun, Kenneth Lett, Timothy Murrel