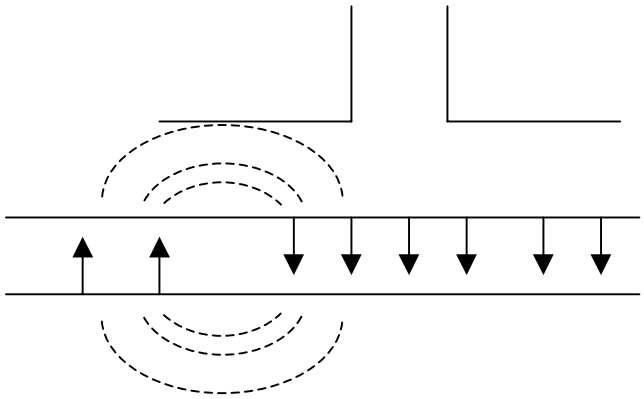
ECE 18-316
INTRO TO DATA STORAGE
FALL 98
PROBLEM SET #8

Due Friday, 10/30/98

In Class or To Jie Zou Before Start of Lab Section (1:30 PM)
Late submissions will not get credit

Consider a transition in a perpendicularly oriented medium:

$$M_y(x) = M\theta(x)$$



If the medium is moving with a velocity υ relative to the head, then

$$M_y(x,t) = M\theta(x-\upsilon t)$$

Use the Reciprocity Theorem with the small gap approximation of the Karlquist field to calculate the voltage as a function of time. Discuss the affect of head-medium spacing and medium thickness on this voltage.