

Exam 2: Thursday

#1: Circuits

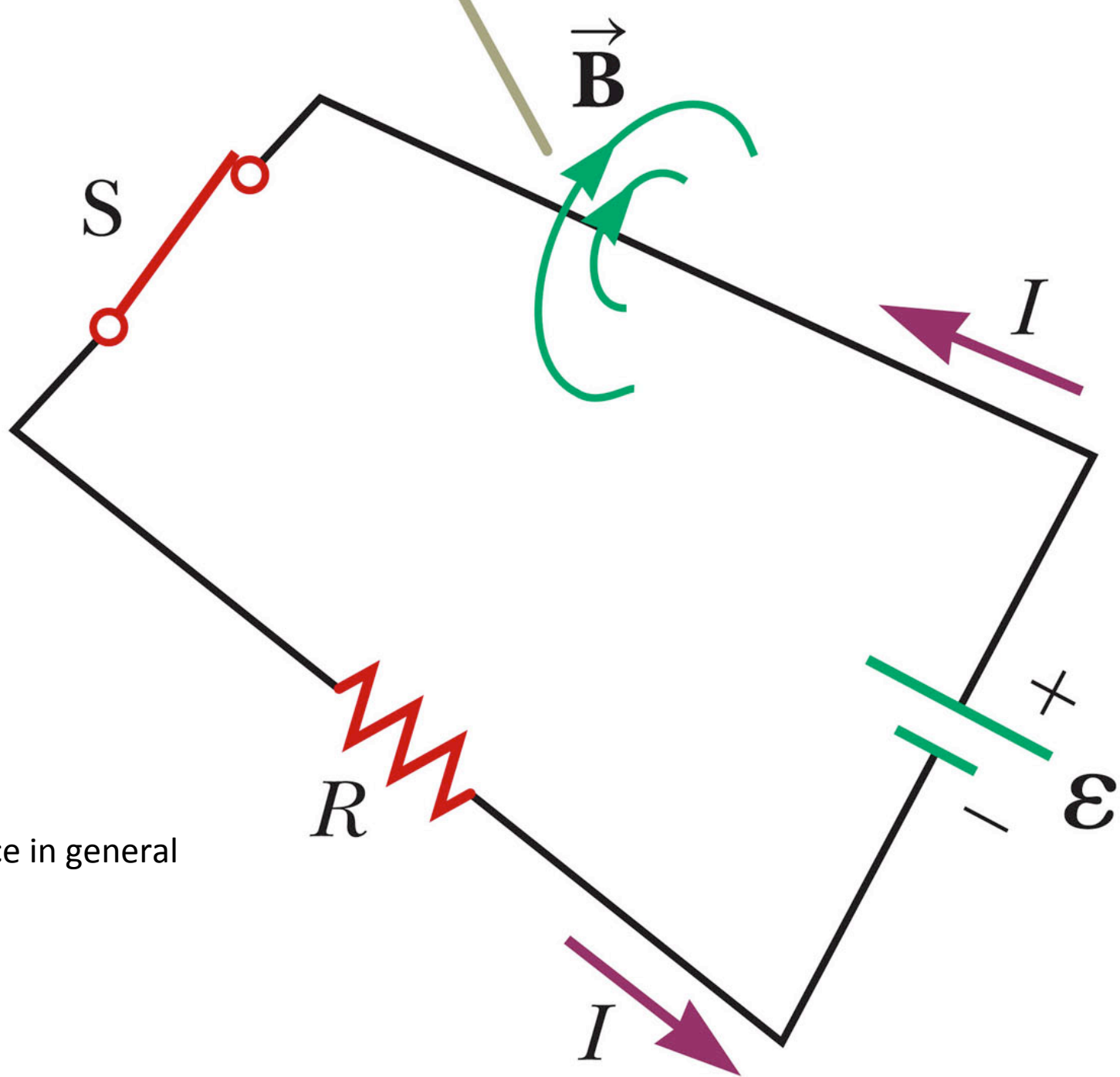
#2: Circuits with capacitors

#3: Magnetic forces

#4: Sources of magnetic field [ampere's law and biot savart law]

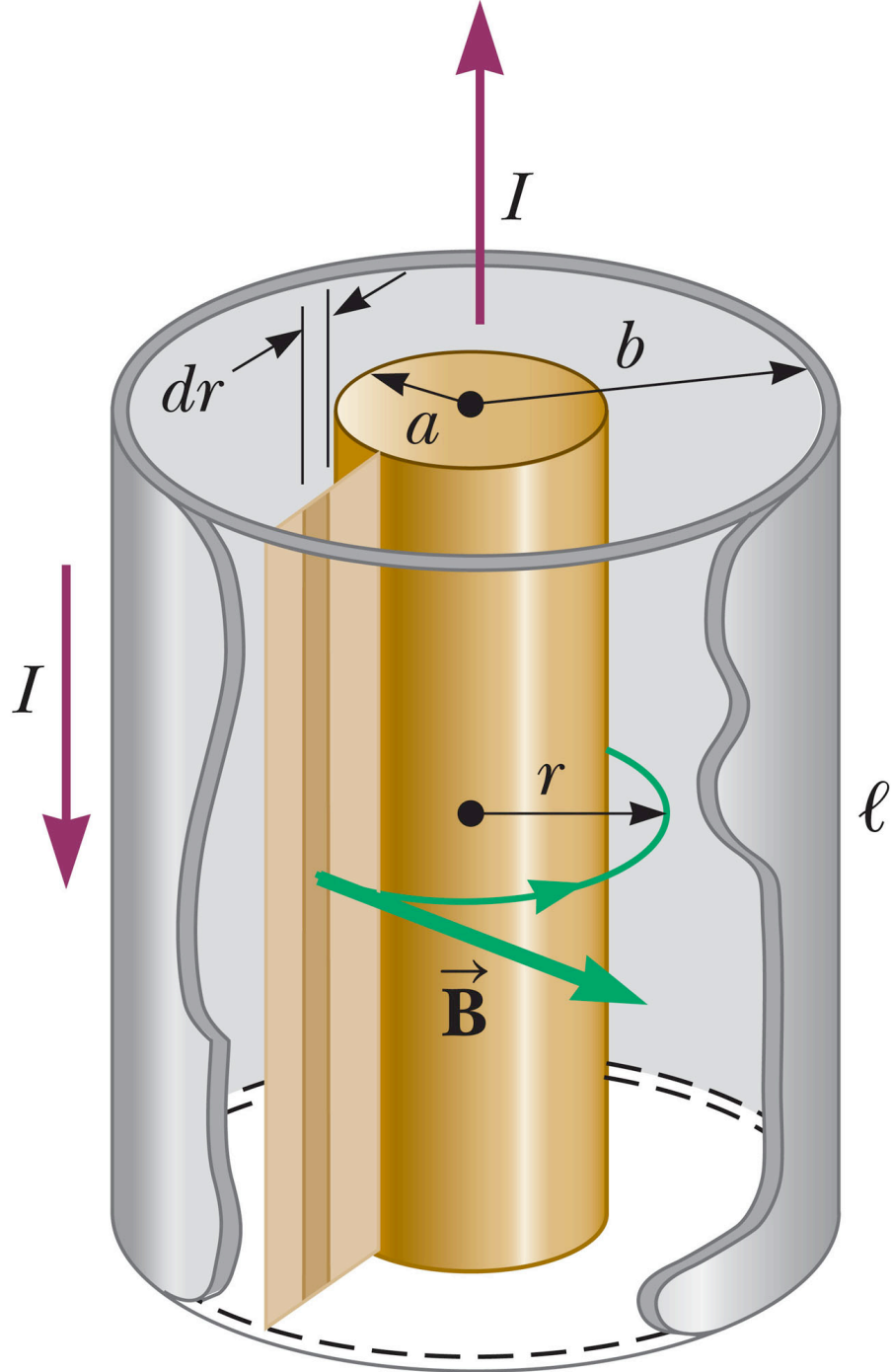
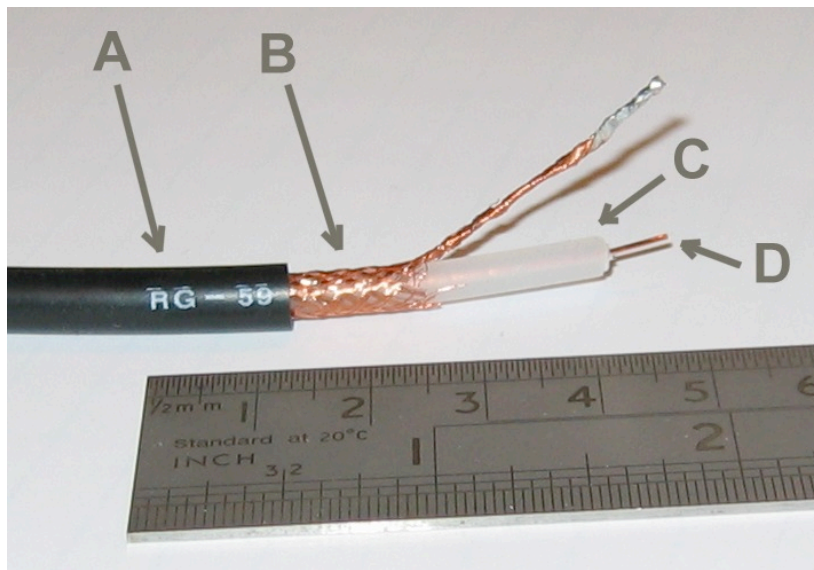
#5: Induced electromotive forces

Review session: 7:30 to 8:50 in HPA 112 tonight

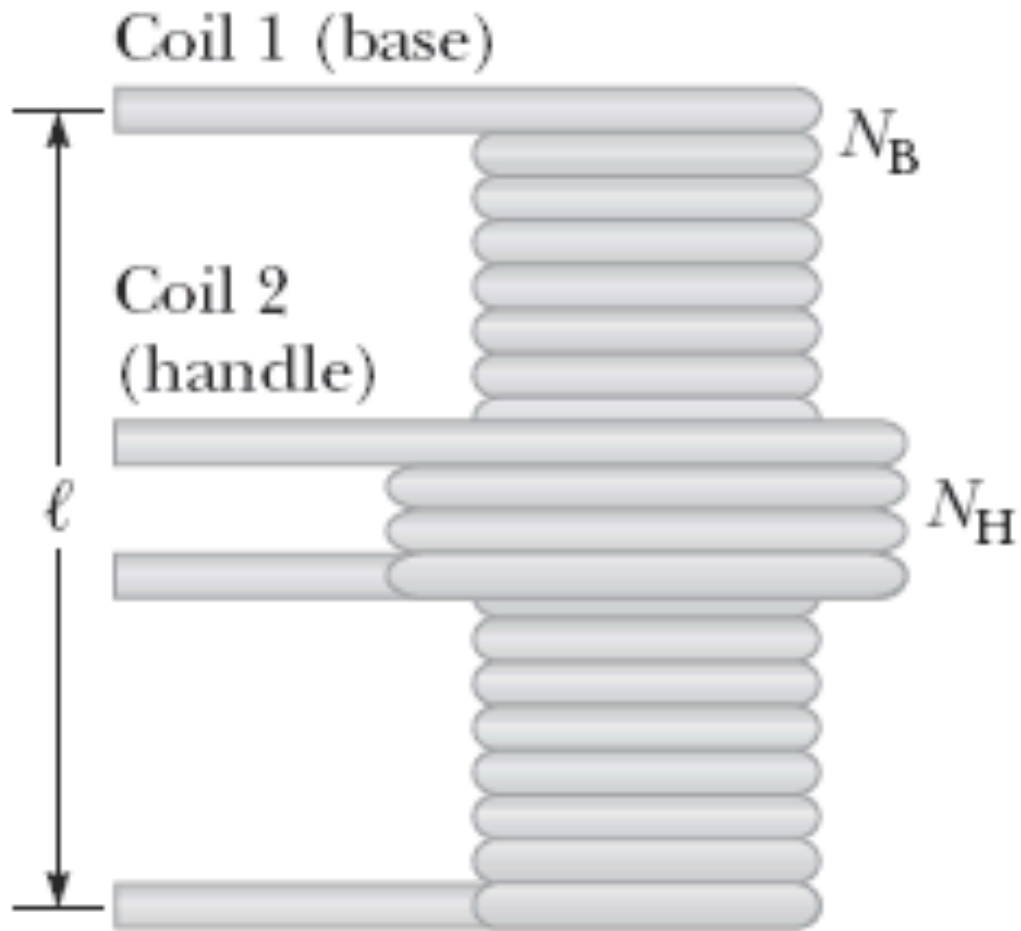


Inductance in general

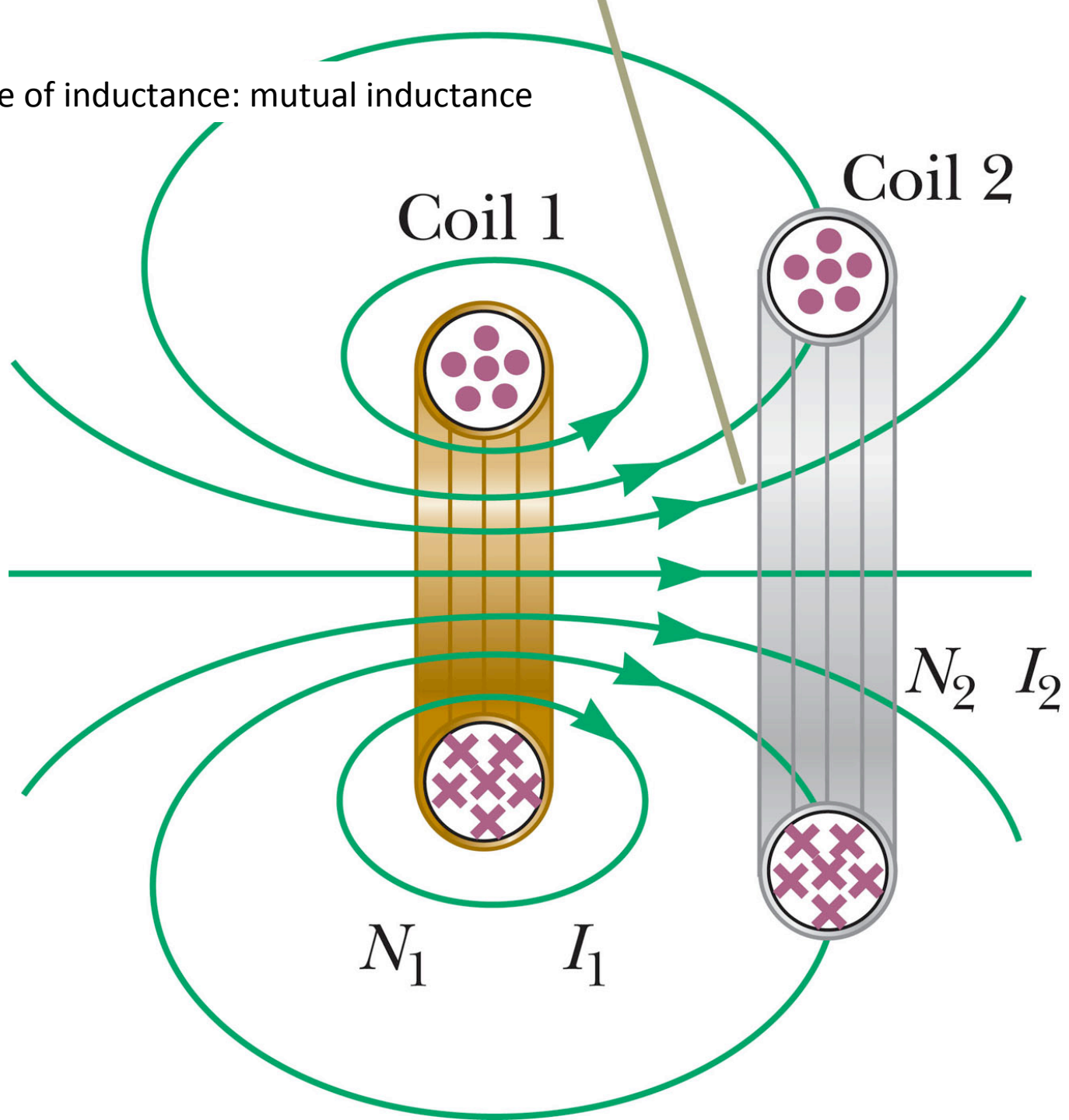
Example: coaxial wire



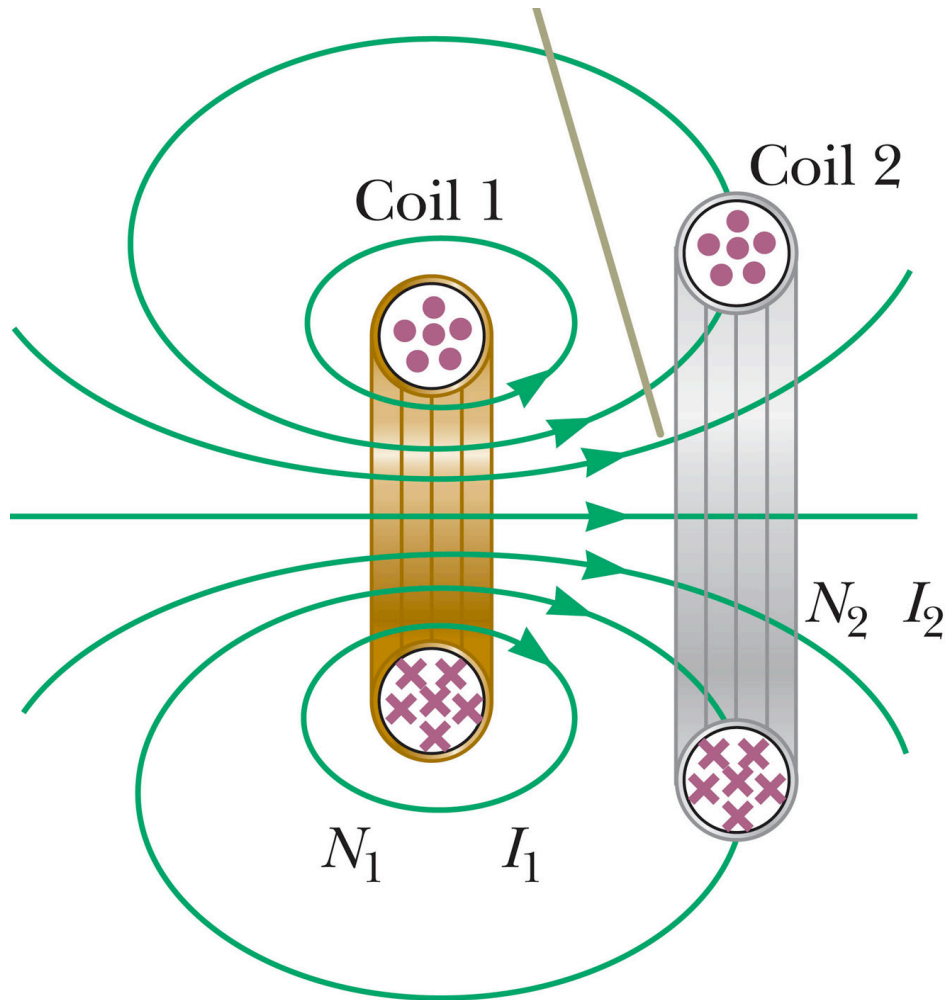
Another situation



Another type of inductance: mutual inductance



Another type of inductance: mutual inductance



$$\mathcal{E}_2 = -M \frac{dI_1}{dt}$$

$$\mathcal{E}_1 = -M \frac{dI_2}{dt}$$