

What is the capacitance of an inductor?

Peng Kuan 彭宽 titang78@gmail.com

11 May 2015

What a weird question, isn't it? An inductor is not a capacitor, how can it have capacitance? In fact, in my [Coil and resistor induction paradox](#) I have found that in an induced loop there is separation of charge due to the induced force on free electrons (see Figure 1) such that near the end B there are more free electrons than near A. I want to test this idea by the experiment shown in [Figure 2](#). The magnetic field of the varying current will charge the 2 ends of the solenoid with opposite charges. So, the 2 conductor foils will be attracted by the solenoid and move.

What do you think of this experiment? Will the foils move?

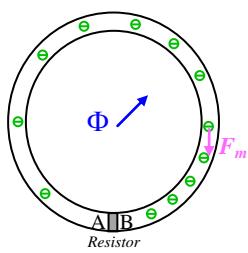


Figure 1

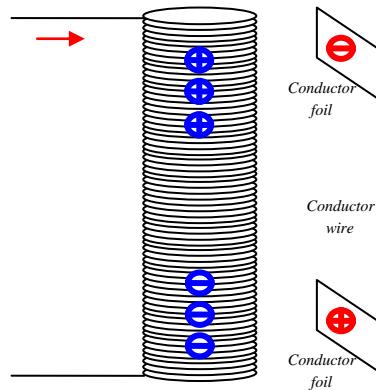


Figure 2

If someone want to do this experiment I will greatly appreciate.