

Duke University
Department of Physics

Physics 271

Spring Term 2017

HOMEWORK 4

Available: February 2

Due: February 9, in Andrew Seredinski's mailbox before class.

Reading: Eggleston 2.4-2.6

Calculate $I(t)$ and $V(t)$ for an RL circuit by the method shown in class (set up a differential equation using Kirchoff's Loop rule and solve it). What is the mechanical analogy for this system?

Text Problems:

Eggleston 2.6, 2.7, 2.7, 2.9, 2.11, 2.12