HW#1 (Physical Analogy)

- Pipes carrying an ideal fluid are just like wires with current flowing through them.
- Rubber membranes stretched across the pipe interior, are like capacitors that holds the current to a limit.
- Turbines within the pipes are like inductors that feeds the circuit with a constant current.
- Turbulence-inducing screens across the pipe interior are like resistors in a circuit.

Voltage	Pressure
Current	Flow rate
Capacitor	Membrane
Inductor	Turbine
Resistor	Screen
Wire	Pipe
Capacitance	Stiffness of membrane
Inductance	Rotational mass of turbine
Resistance	Fine-ness of screen mesh
Initial voltage across a capacitor	Amount by which the membrane is initially stretched.
Initial current through an inductor	Initial turbine speed