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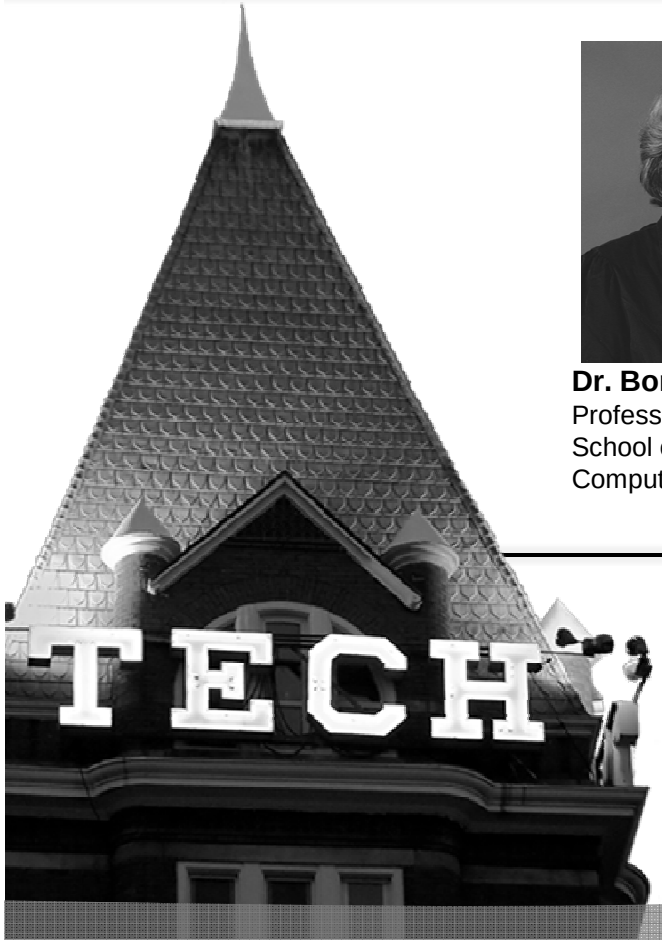

Linear Circuits

Dr. Bonnie Ferri
Professor and Associate Chair
School of Electrical and
Computer Engineering

An introduction to linear electric circuit elements and a study of circuits containing such devices.

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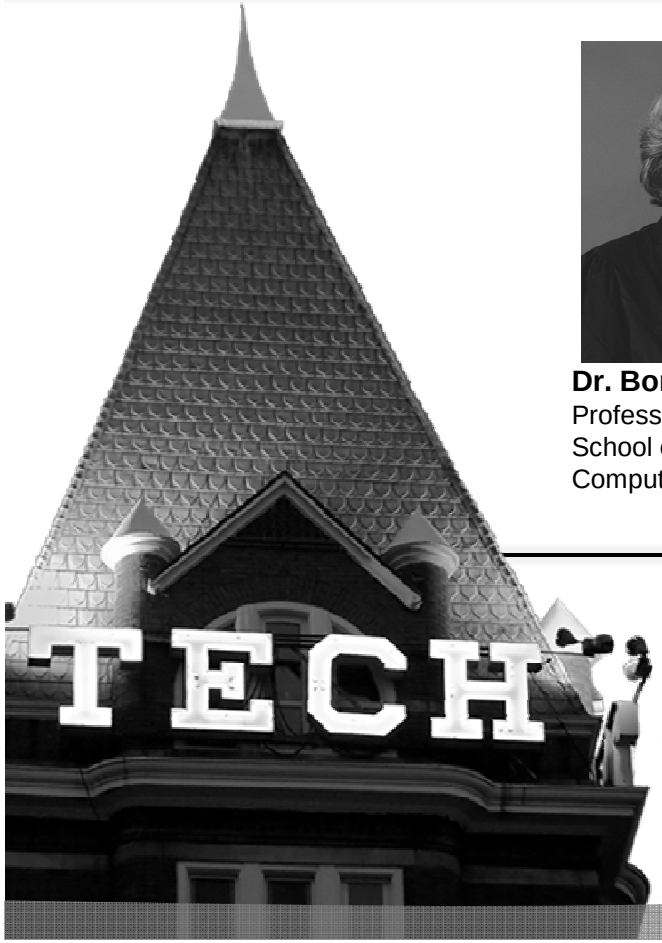


Lab Demo: Resistors and Connections

Dr. Bonnie Ferri
Professor and Associate Chair
School of Electrical and
Computer Engineering

Resistors in series and parallel, measuring voltage and current in circuits.

Module 2: Resistive Circuits

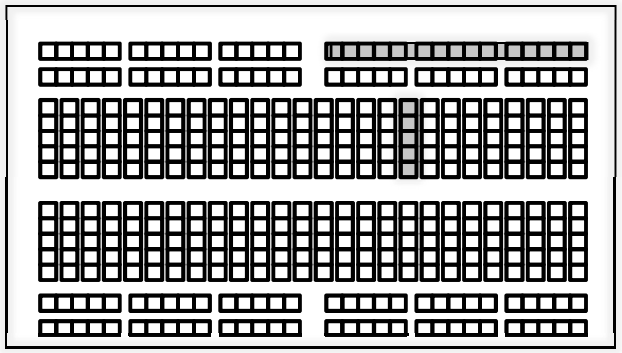
- Resistance
- Kirchhoff's Laws
- Resistors
- Superposition
- Systematic Solution Methods
- Maximum Power Transfer
- Application: Sensors

Lesson Objectives

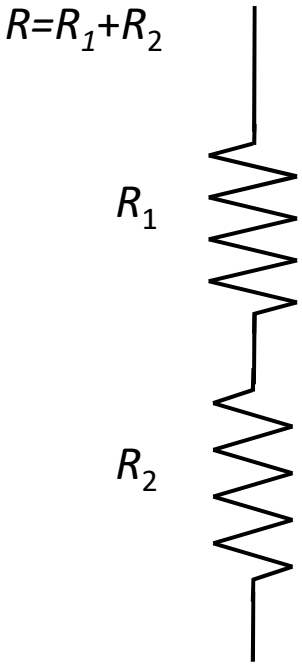
Demonstrate

- Series and parallel resistance
- Measure voltage and current using the voltage divider law and Ohm's Law

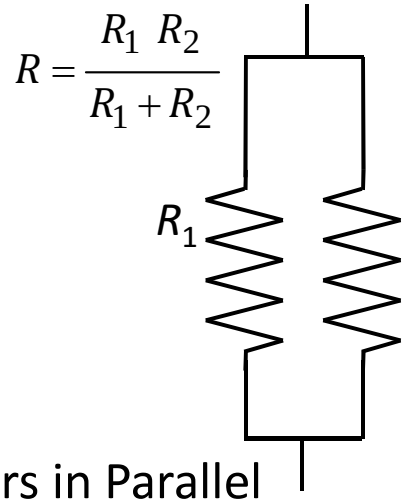
Review



Protoboard



Resistors in Series



Resistors in Parallel

Lab Demo: Resistors and Connections

Summary

- Connect physical resistors in parallel and in series
- Measure voltages and currents in a circuit, applying the voltage divider law and Ohm's Law

Next Lesson

- Superposition to handle multiple sources

Credits

Thanks to Marion Crowder (School of Electrical and Computer Engineering at Georgia Tech) for video-taping the experiment

DMM used in experiment is manufactured by Fluke Corporation