**E1: Applied Electromagnetics**

Electromagnetics is a fundamental area of science. Engineering Electromagnetics encompasses applications of electromagnetic theory in areas such as high frequency (RF, microwave) circuits, sources, and systems; antennas; wireless communications; electromagnetic wave propagation; computational electromagnetics; pulsed power science and technology; plasma science; particle accelerator science and technology; electromagnetic compatibility (EMC); electromagnetic effects; and bioelectromagnetics. The ECE department has active research in most of these areas.

**Area Chair:** Prof. Mark Gilmore (http://www.ece.unm.edu/~gilmore/)

**Faculty Members:**

- Prof. Christos Christodoulou (http://www.ece.unm.edu/faculty/ecg/)
- Prof. Jane Lehr (http://aperiodic.pagecloud.com/)
- Prof. Edl Shamiloglu (http://www.ece.unm.edu/faculty/edl/)

**Major core courses:**

ECE560 Introduction to Microwave Engineering (Fall), ECE561 Electrodynamics (Spring) and either:

1) ECE534 Plasma Physics I (Fall, Plasma Science track),
   OR

2) ECE569 Antennas (Spring, Antennas track).

4th course required for Ph.D.: ECE 563 Computational Methods for Electromagnetics