

What is the Propagation Group?

The Propagation Group is a research group in Georgia Tech's department of Electrical & Computer Engineering. With a unique blend of RF and electromagnetic expertise, the members of the Propagation Group research a broad spectrum of radio technologies, including location techniques for cellular phones that dial 911, futuristic RFID tags that use organic circuits, super-low power sensors that protect the power grid, and radio cameras that "image" waves in the real world. Our mission statement is simply

to train talented and creative engineering researchers that will **lead** the development of technology in the 21^{st} century.

What Makes Us Different?

- *Industry Collaboration:* The Group researches cutting-edge problems and technologies; in turn, the Group relies on industry sponsors for a majority of its funding.
- *Multidisciplinary Research Programs:* All researchers are expected to be proficient in software, hardware, theory, field measurement, and technical communications.
- *Domestic Recruitment:* Many of the graduate researchers are heavily recruited from the undergraduate program at Georgia Tech.
- International Partners: PhD graduate students in the Group spend at least one term overseas in one of our partner laboratories.
- *Commitment to Educational Excellence:* Prof. Durgin has won several teaching, including the 2007 Howard Ector Outstanding Classroom Teacher award. The group's PhD students are also actively engaged in undergraduate teaching and research mentoring.

Did You Know That ... ?

- Propagation Group researchers designed the propagation engine for a widely-used 911 cell phone location technology
- Prof. Durgin published *Space-Time Wireless Channels* in 2002 the first textbook on MIMO and channel modeling
- the Group was first to characterize realistic RF link budgets for RFID tags
- in 1997 (at Virginia Tech) Prof. Durgin conducted the first systematic measurement of 6 GHz spectrum, now a premiere band for wireless networking