Laboratory of Electronics Antennas and Telecommunications

Joint research unit supported by University Nice Sophia Antipolis and CNRS

Member of Université Côte d’Azur
Location
About 60 people

- Research/Teaching
- Administrative/Technical
- PhD
- PostDoc
- Internship
- Visiting
Teaching

- **Faculty of Sciences**
  - Bachelor degree in electronics
  - Master degree ESTel in electronics, systems and telecommunications
  - Master degree GBM in biomedical engineering

- **Polytech Nice-Sophia Engineering School**
  - Electronic department
  - Computer science department

- **University institute of technology (IUT) Nice Côte d'Azur**
  - Electrical engineering and industrial computer science department
  - Network and telecommunication department
Antenna Design and Modelling

- **Miniature Antennas**
  - Internet-of-things, e-health, wireless sensor networks
- **Multiple Antenna System**
  - Reconfigurable radiation patterns, 5G, diversity systems, MIMO
- **TLM Electromagnetic Modeling**
  - Large structures, thin wires, thermic effects
Imaging and Associated Antenna Systems

- EM modeling for direct and inverse problems
  - Radar, microwave and mm-wave imaging, e-health
- Microwave and mm-wave measurements
  - Radar, imaging, complex media, target characterization
- Antennas for radar systems
  - Mm-wave radar, GPR, medical imaging
Modeling and System Design of Communicating Objects

- Smart Sensor Networks (IoT)
- System-level modeling of low-power SoC
- Bio-inspired hardware architectures
- Machine learning
- Design of reconfigurable and heterogeneous architectures, adaptive systems
Equipment

- Computer resources for analysis, modeling and simulation
  - Connections to large French academic computer centers
  - Microelectronic and Electromagnetic simulations
  - Commercial and in-house software
Equipment

- Antenna and circuit prototyping
  - Realization of printed antennas and circuits
  - Electronic boards assembly
  - Cutting, shaping, and soldering tools
Equipment

- Microwave measurement facilities for antenna assessments
  - Return loss measurements up to 110 GHz
  - Anechoic chamber for radiation measurements from 820MHz to 110GHz
  - 3D Near-Field/Far Field scanner for active integrated antenna measurements
Collaborations

- **Scientific**

- **Industrial**
Cremant

- Joint Antenna Research Center in PACA Region
  - 1st Joint research center between Orange Labs and a University/CNRS lab
  - The only Antenna Research Center in PACA Region

- Topics
  - Electromagnetic modeling, numerical methods
  - Antenna integration
  - e-Health engineering
  - Smart multi-sensor systems
  - New material and artificial material-based antennas