



# LIRMM

The Montpellier Laboratory of Informatics, Robotics, and Microelectronics (**LIRMM**) is attached to Montpellier University (**Université Montpellier**) and the **French National Center for Scientific Research (CNRS)**. Its activity is developed within three scientific research departments (**Informatics, Microelectronics, Robotics**), 22 team-projects and several common services (administrative service, logistics, technical and computer service, communication, documentation, technology transfer and start-up incubation...). Staff: 400 people.

informatics  
Robotics  
Microelectronics

## Informatics

The Informatics Department brings together 14 team-projects covering a wide and varied research spectrum, going from theoretical informatics to concrete applications and interfaces with other fields.



The scientific activities of the Department is organized in 4 research poles :

- **Algorithms and Computing**
- **Data and Knowledge**
- **Artificial Intelligence**
- **Computational and Modeling Methods for Life and Environmental Sciences**

## Microelectronics

### ➤ Design of Integrated Circuits and Systems

MPSoC Architectures - Reconfigurable Architectures - Adaptive Systems - Design flow and CAD tools - Performance Analysis and Modeling - Sensors and Microsystems - Variability

### ➤ Test of Integrated Circuits and Systems

2D and 3D Systems - Digital, Analog and RF Circuits - Memories - Microsystems - Low Power Circuits - Defect Modeling - Fault Tolerance

### ➤ Applications

Life Science Interface - Environment Observation - Health - Hardware Cryptography and Security - Transport - Communications



## Robotics

### ➤ Mechanical Design

Optimisation - Performance analysis - Simulation

### ➤ Modelling

Modelling of interaction - 3D geometrical modelling - Kinematics and dynamics modelling of robots - Human sensory-motor system modelling

### ➤ Control

Control architectures - Adaptive control - Planning/Control - Visual servoing - Control of the human musculo-skeletal system - Force feedback teleoperation - Parameter estimation

### ➤ Perception

Vision - Haptic interaction - Data fusion - Virtual reality

### ➤ Applications

Fast industrial robotics - Medical robotics - Underwater robotics - Humanoid robotics - Man-robot interactions - Functional electrical stimulation for assistance and rehabilitation - Medical Imaging - Encryption



## contacts

Director  
Philippe Poinet ([directeur@lirmm.fr](mailto:directeur@lirmm.fr))

Deputy Directors  
Abdoulaye Gamatie ([abdoulaye.gamatie@lirmm.fr](mailto:abdoulaye.gamatie@lirmm.fr))

Head of Informatics Department  
Marianne Huchard ([marianne.huchard@lirmm.fr](mailto:marianne.huchard@lirmm.fr))

Head of Robotics Department  
Marc Gouitfardo ([marc.gouitfardo@lirmm.fr](mailto:marc.gouitfardo@lirmm.fr))

Head of Microelectronics Department  
Laurent Latorre ([laurent.latorre@lirmm.fr](mailto:laurent.latorre@lirmm.fr))

Communications  
Virginie Fèche ([fèche@lirmm.fr](mailto:fèche@lirmm.fr))



[www.lirmm.fr](http://www.lirmm.fr)

