

# Experimental physics and stochastic modelling



ECTS  
5 crédits



Hourly volume  
59h

 Toulouse

## Introducing

### Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):

- Operation of the different sensors used during the lab sessions. They will know how to use them in order to solve a problem and view the results critically.
- Stochastic modelling of measurements, confidence intervals, statistical hypothesis tests, linear models.

The student will be able to build a data acquisition system starting from different sensors, to analyse the result and quantify the various components in measurement errors, to build a statistical model from observations in order to confirm or invalidate hypotheses concerning the problem at hand, and to plan experiments in simple cases.

### Necessary prerequisites

I2AIMT21 Probability in IMACS

## Practical info

### Location(s)