



Organizers:
Paulo J Oliveira
(Coimbra, Portugal)
Catarina R Oliveira
(Coimbra, Portugal)



Coimbra, Portugal, 22-24 May 2019



Pre-congress course | How (not) to lie with statistics

Organizer: Nuno Lourenço (Nuno Lourenço, CISUC, Department of Informatics Engineering, University of Coimbra)

Day: Wednesday 22 May, 11.30-13.00

Meeting room: Meeting room Petipa, Hotel Vila Gale (Congress venue 1)

Admission: Limited seats to 30.

Pre-registration is required through the official congress registration form

Wednesday, 22 May

11.30-13.00 Session 1 : How (not) to lie with Statistics

Chairs: Nuno Lourenço, CISUC, Department of Informatics Engineering, University of Coimbra

Statistics is an essential tool for supporting researchers' hypothesis. However, it won't be of any help if it is used wrongly. As such, we need to be very cautious when preparing the condition for our experiments, because it is the data resulting from them that will be the aim of our analysis. The conditions in which our experiments were conducted are as important as the data we have gathered. It is the conjunction of these two things that will define what are the analysis and statistical tests that are going to be performed. Moreover, we also need to know how to report all the steps of our analysis, so others can understand and replicate what we have done.

In the first part of these introductory course we will cover the following topics:

- Basic Concepts
- Descriptive Statistics
- Inferential Statistics
- Design of Experiments

In the second part, we will consider a case study and statistical tools to define, analyse and report findings. There are many computational instruments that aid us with the analysis of data, and many of them are freely available on the web. We will take a look at some of these. Please bring your own laptop!

(More information will be conveyed to the participants closer to the date of the course!)