



School of Advanced Studies

## SAS ACTIVITIES 2015 to acquire transferable skills

# Statistics and Data Management

### Mauro Angeletti UNICAM

#### Camerino

October 12, 13, 14, 15

from 2,30 pm to 6.30 pm

SAS Computer Room

#### PART 1. INTRODUCTION TO STATISTICS

- 1. Statistics and samples
- 2. Displaying data
- 3. Describing data
- 4. Estimating with uncertainty
- 5. Probability
- 6. Hypothesis testing

#### PART 2. PROPORTIONS AND FREQUENCIES

- 7. Analyzing proportions
- 8. Fitting probability models to frequency data
- 9. Contingency analysis: associations between categorical variables

#### PART 3. COMPARING NUMERICAL VALUES

- 10. The normal distribution
- 11. Inference for a normal population
- 12. Comparing two means
- 13. Which test should I use?
- 14. Designing experiments
- 15. Comparing means of more than two groups
- 16. ANOVA and post-hoc tests

#### PART 4. REGRESSION AND CORRELATION

- 17. Correlation between numerical variables
- 18. Regression
- 19. Fitting Models to experimental data

#### NOTES:

All the topics will be followed by hands-on sessions using R (an open-source language for data analysis).
Reliable WiFi connection and individual PCs needed.

info

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