

(Computational) Reproducible Research

MOOC

Observation vs. Experiments

- Measurement / Tracing
- Modeling (parameters)
- Planning and Design of Experiments

Statistics

- Confidence interval and p-value
- Linear model and model selection
- Frequentist vs. Bayesian
- Test and inference

"Meta" Science

- Epistemology
- Scientific Integrity (fraud & errors)
- Publication, evaluation, and credit
- Ethics

Data Management

- DMP, License
- File organisation, metadata
- Version, archiving

Data Analysis/Visualization/Presentation

- R (python)
- Tidyverse (dplyr, ggplot)

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