Ph.D course in Theoretical and Scientific Data Science

Head of the Ph.D course: **Prof. Guido SANGUINETTI**
Web site: **[Theoretical and Scientific Data Science](#)**
Research lines:

- Bayesian methods and machine learning
- Theory and applications of neural networks
- Information theory
- Simulation-Based Inference
- Unsupervised segmentation of high-dimensional data and dimensionality reduction
- Statistical modelling of biomedical data and bioinformatics
- Cosmological and astrophysical data analysis and model selection
- Applications of data science to statistical mechanics, neurosciences, and condensed matter physics
- Machine learning applied to Oncology
- Machine learning for materials science

Fellowships available: 5 funded by FSE +

Admission: **Academic and scientific qualifications + written exam + oral exam**
Beginning of the Courses: **1 October, 2026**

Evaluation of academic and scientific qualifications: 10 points
Access to Written Exam: minimum mark of 7/10 on academic and scientific qualifications
Evaluation of Written Exam: 40 points
Access to Oral Exam: minimum mark of 28/40 in the written exam evaluation
Evaluation of Oral Exam: 50 points

To be considered eligible, candidates must pass all the phases (academic qualifications, written test, and interview) with a minimum mark of 7/10 or equivalent

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Deadline for online submission of applications: 27th February, 2026

Written Exam: **19th March, 2026**
Oral Exam: **23th March, 2026**

Admission to the written exam and results of all evaluations will be notified by email.