Ph.D course in Theoretical and Scientific Data Science

Head of the Ph.D course: **Prof. Roberto Trotta**

Web site: **[Theoretical and Scientific Data Science](#)**

Fellowships available:

4 financed by SISSA
- 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

2 financed by Human Technopole Foundation (see also specific announcement)
- Data Science methods for molecular biomedicine and biological imaging
- Computer vision applied to biological data
- Statistical physics, machine learning and systems biology for the prediction of antibiotic resistance
- Cancer evolution and reconstruction of dynamical systems
- Spatial modelling of gene expression in tissues

Admission: **Academic and scientific qualifications + written exam + oral exam**

Beginning of the Courses: 1 October, 2024

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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First Session

Deadline for online submission of applications: 23rd February, 2024

Written Exam: **11th March, 2024**
Oral Exam: **25 -29th March, 2024**

Second Session (only if there should still be places available after the first one)

Deadline for online submission of applications: 23 August, 2024

Written Exam: **2nd September, 2024**
Oral Exam: **9th - 13th September, 2023**

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