Curriculum Vitae

Marco Cappa

Physicist

Personal information

Nationality: Italian

Gender: Male

Work experience

Research Scholarship | Sapienza - Università di Roma

08/2024 – 10/2024 – Rome, Italy

Research on phase separation in DNA nanostar mixtures. Resulted in a publication draft.

Master Thesis | Sapienza - Università di Roma

06/2023 – 03/2024 – Rome, Italy

Study of phase separation in DNA aggregates using phase field models.

Radial Distribution Function Calculation Project | Sapienza - Università di Roma

06/2023 – 07/2023 – Rome, Italy

Developed a C++ estimator for g(r) using force sampling.

Monte Carlo Simulation Project | Sapienza - Università di Roma

06/2023 – 07/2023 – Rome, Italy

Developed Monte Carlo C++ code for simulating hard boxes.

Experimental FTIR Spectroscopy | Sapienza - Università di Roma

05/2022 – 07/2022 – Rome, Italy

FTIR spectroscopy study on SARS-CoV-2 spike proteins.

Education and training

Physics Summer School | Wageningen University and Research

06/2025 – Han-Sur-Lesse, Belgium

One-week school on Soft Matter Physics topics: active matter, interfaces, statistical physics, rheology.

PhD in Physics | Sapienza - Università di Roma

11/2024 – 11/2027 – Rome, Italy

Transient networks of associative polymers, ML potentials. Supervisor: L. Rovigatti

Workshop | Brunel University, London

04/09/2023 – 05/09/2023 – London, UK

Training on interfacial free energy models.

Master Degree in Physics | Sapienza - Università di Roma

10/2021 – 03/2024 – Rome, Italy

Final grade: 110/110 magna cum laude. Focus on Soft Matter, Biophysics, Simulations.

Bachelor Degree in Physics | Sapienza - Università di Roma

09/2018 – 10/2021 – Rome, Italy

Final grade: 110/110 magna cum laude.

Scientific Secondary School Diploma

09/2013 – 06/2018

Final grade: 100/100.

Personal skills

Languages:

Italian: Native

English: Fluent

French: Fluent

Digital skills:

- Programming: Python, C++, C, Matlab
- Office Suite, LaTeX

Soft skills:

- Teamwork
- Communication
- Time management

- Organisation
- Critical thinking
- Problem solving

Publications

[1] Cappa, Marco, et al. "A phase-field model for solutions of DNA-made particles." J. Chem. Phys. 162.19 (2025).

Honours and awards

- Student with study merits (BSc): Fee exemptions based on performance.
- Erasmus+ Scholarship (2022–2023): Semester abroad at LMU Munich.

About me

Highly motivated recent graduate in Physics, passionate about Biophysics and Soft Matter, with experience in simulations and modeling of patchy particles and DNA systems.

Rome, 07/07/2025

F.to Marco Cappa

Ai fini della pubblicazione