Sonia Cambiaso

Curriculum Vitae

Education

11/2021 – present	**Phd in Physics and Nanoscience**, Università degli Studi di Genova (UniGe), Department of Physics.
Supervisors:	Prof. Giulia Rossi and Dr. Davide Bochicchio
09/2019 – 10/2021	**Master's degree in Physics**, *110/110*, UniGe, Department of Physics.
09/2016 – 10/2019	**Bachelor's degree in Physics**, *105/110*, UniGe, Department of Physics.
Thesis title:	*Equilibrium crystal shape and Wulff's theorem* (thesis in Italian)
Supervisor:	Prof. Lorenzo Mattera
09/2011 – 07/2016	**Secondary school diploma:** Scientific High School, *100/100*.
	Liceo "O. Grassi" - Savona (Italy)

Master thesis

Title	*Development of a coarse-grained model of polydimethylsiloxane for the study of polymer nanocomposites*
Supervisors	Prof. Giulia Rossi and Dr. Davide Bochicchio

Skills

Programming languages	Python (Advanced), C++ (Intermediate), Bash (Intermediate), MATLAB (Intermediate), LabVIEW G (Foundation).
Data analysis	ROOT Data Analysis Framework, SciDAVis (Scientific Data Analysis and Visualization), Microsoft Excel.
Techniques and software	Molecular dynamics (Advanced), Enhanced Sampling techniques (Intermediate), GROMACS (Advanced).
Operating systems	GNU/Linux, Windows.
Typesetting	Microsoft Office, LibreOffice, LaTeX.

Languages

- **English**
  Advanced
- **Italian**
  Mother tongue

Tutor activities

02/2022	Tutor activity at the stage for high school students at the Department of Physics (UniGe).
10/2022 - 06/2023	Tutor teaching activity for General Physics 2-3 courses at the Department of Physics (UniGe).

Schools and Conferences

04/2022 Poster presentation (*Modeling metal and oxide surfaces and nanoparticles at coarse-grained level*) at "Cluster-Surface Interaction Workshop 2022", Santa Margherita Ligure, Italy.

07/2022 CSC Summer School in High Performance Computing, Espoo, Finland.

10/2022 Poster presentation (*Coarse-grained model of functionalized Si-based nanoporous material*) at the "Seventh International Conference on Multi-functional, Hybrid and Nanomaterials", Genoa, Italy.

05/2023 Nanosafety Training School 2023, Venice, Italy.

08/2023 Poster presentation (*Coarse-grained simulations unveil the interactions of metal oxide nanoparticles with biological systems*) at EBSA Congress 2023, Stockholm, Sweeden.

Publications

10/2022 Cambiaso S., Rasera F., Rossi G. and Bochicchio D., *Development of a transferable coarse-grained model of polydimethylsiloxane*, Soft Matter, 2022, 18, 7887.

Research

Links to research activities:

- Group website: https://www.nanobiocomp.com
- Personal research: PhDFirstYearReport.pdf