Francesco Guidarelli Mattioli

Ph.D. student in Physics

Research

2022–present **Ph.D. position**, *Department of Physics, University of Rome La Sapienza*.
Competitive selection

Research project, three years.
Project: Machine Learned Multi-body potentials for effective field representation from water to proteins

Publications, 2023.
- J. Chem. Phys. 158, 104501 (2023); DOI: 10.1063/5.0139245
- J. Phys. Chem. B, 127(17), 3894-3901 (2023); DOI: 10.1021/acs.jpcb.3c00693

Education and Schools

2018–2020 **Master's degree**, *Physics, University of Rome La Sapienza*.
Final grade: 110/110 with honors; Exam average: 29.76/30; Honors: 6

Research Experience as Graduate Student

Physics Laboratory, *Experimental research*, 1 month, IIT@Sapienza laboratory.
Project: Measurement and analysis of CARS peaks on Alzheimer nervous tissue

Teaching Experience

Nov 2023 – Jan 2024 **Physics II Exercise Lectures for Chemistry Sciences**, *Dept. of Chemistry, University of Rome La Sapienza*.
Competitive selection

Mar 2023 – Jul 2023 **Physics Exercise Lectures for Aerospace Engineering**, *Dept. of Engineering, University of Rome La Sapienza*.
Competitive selection

Awards

2016–2018 **Bachelor's degree**, *Biomedical Engineering, University of Rome La Sapienza*.
Final grade: 110/110 with honors; Exam average: 27.64/30; Honors: 5

Software and Programming Skills

Languages:	C, FORTRAN, Python, MATLAB, Bash
Deep Learning:	TensorFlow (C, C++ and Python)
Molecular Dynamics:	GROMACS, VMD, AmberTools, LAMMPS
Parallel Computing:	CUDA, OpenMP basics

Languages

Italian Native

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