



PhD Physics – 34th Cycle

Name and Surname	Title of the Thesis	Tutor	Graduation year
Davide Bazzanella	Microring Based Neuromorphic Photonics	P. Bettotti	2022
Matteo Ceppelli	Time-resolved optical diagnostics for plasma dissociation of CO ₂	P. Tosi	2022
Davide Dal Bosco	Torsion Pendulum Testing of the LISA Charge Management System	R. Dolesi	2023
Andrea Di Luca	Deep Learning Models Resizing for High Energy Physics experiments	R. Iuppa	2022
Elena Filandri	Effective field theory description of a cluster nuclei: The ⁹ Be ground state and ⁹ Be photodisintegration	W. Leidemann	2022
Giuseppe Gebbia	Design and implementation of a space qualified DAQ system for the HEPD-02 silicon tracker	P. Zuccon	2022
Marco Giulini	The mapping problem in coarse-grained modelling of biomolecules	R. Potestio	2022
Andrea Grimaldi	Mode matching sensing in Frequency Dependent Squeezing source for Advanced Virgo Plus	A. Perreca	2023
Nicolò Leone	A quantum entropy source based on Single Photon Entanglement	L. Pavesi	2022
Andrea Miani	Agnostic method to detect low energetic signals nearby a gravitational wave transient from a binary black hole system	G.A. Prodi	2022
Marta Missiaggia	Expanding microdosimetry from radiation field characterization to radiobiological damage modeling	C. La Tessa	2022
Alberto Munoz de las Heras	Non-Hermitian and Topological Features of Photonic Systems	I. Carusotto	2022
Lorenzo Petrolli	A convergent and multiscale assessment of DNA damage by particle radiation	G. Lattanzi	2022
Vincent Richardson	Gas phase studies of ion-molecule reactions relevant to interstellar environments	D. Ascenzi	2022
Marta Rigoli	The structure-dynamics-function relation in proteins: bridging all-atom molecular dynamics, experiments, and simplified models.	R. Potestio	2022



Santo Maria Roccuzzo	Supersolidity in a Dipolar Bose Gas	A. Recati	2021
Matteo Sighinolfi	Open Quantum Systems and Ultracold Atoms	A. Recati	2022
Jacopo Terragni	Laser Ablation for Space Applications	A. Miotello	2022
Francesco Turro	Quantum algorithms for many-body structure and dynamics	F. Pederiva	2022
Michele Valentini	The longitudinal control for the Advanced Virgo Plus gravitational wave detector	A. Perreca	2023
Silvia Vicentini	Vacuum decay and quadratic gravity	M. Rinaldi	2022
Louise Wolswijk	Equilibrium and out-of-equilibrium physics of Bose gases at finite temperature	G. Ferrari	2022
Clara Zaccaria	Light induced engrams in in-vitro neuronal cultures	L. Pavesi	2022
Luigi Zanovello	Target search of active particles in complex environments	P. Faccioli e T. Franosch	2022