

UNIVERSITA' DEGLI STUDI DI MILANO

PUBLIC SELECTION FOR THE ADMISSION TO PH.D. PROGRAMME - ACADEMIC YEAR 2024/2025

PH.D PROGRAMME IN PHYSICS, ASTROPHYSICS AND APPLIED PHYSICS - XL CYCLE

¹ to be admitted to interview, candidates must obtain a minimum of 10 points in the curriculum and a minimum of 5 points in the research project.

surname	name	curriculum evaluation ¹	project evaluation ¹	total score	outcome (admitted / not admitted / excluded *)	date of interview	interview timing (Italy time zone)	on-site or on-line	project title
AHMAD	DANYAL	14,58	1,00	15,58	not admitted	-	-	-	Nanostructured Materials with Potential for Energy Production, Conversion, and Storage Applications: Synthesis and Characterization.
ALIMONTI	DAVIDE	12,16	9,00	21,16	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	Machine-Learning Interaction Potentials for Activated Processes.
ALMAGIONI	CECILIA DELIA	12,64	9,00	21,64	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	Snow Cover in Karakoram and Western Himalayas: Past and Future.
AMJAD	MOHSIN	13,58	4,50	18,08	not admitted	-	-	-	Metal-Doped Carbon Nanocomposites: Synthesis, Characterization, and Energy Storage.
APREA	GIACOMO	11,49	8,25	19,74	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	A Semi-Analytical Model of Entropy Generation in Galaxy Cluster.
ASGHAR	JUNAID	10,42	2,00	12,42	not admitted	-	-	-	RESEARCH PROPOSAL-area of fundamental electronics properties of low dimensional materials and their different uses in technological applications
ASHTAKALA	VENKATA NAGA SAI MEGHANATH	13,58	4,00	17,58	not admitted	-	-	-	Quantum Supremacy in Distributed Computation among Networks.
ATTA	USMAN	11,58	4,00	15,58	not admitted	-	-	-	Unveiling Neutrino Secrets: Flavour Symmetries for Mass Generation, Oscillations and Beyond.
ATZORI	DANIELE	16,00	10,00	26,00	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	Calculating the Shape of Events.
AYUB	NOMAN	13,50	2,00	15,50	not admitted	-	-	-	Nanostructured materials with potential for energy production, conversion and storage applications: synthesis and characterization.

BAIDYA	MAINAK	12,58	3,50	16,08	not admitted	-	-	-	Early Universe Cosmology at the Interface of High Energy Theory and Quantum Information.
BARCELLA	ALICE	16,00	8,00	24,00	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	Controllo e ottimizzazione della qualità tecnica dell'immagine radiologica del seno.
BELLINGERI	ANDREA	12,53	7,75	20,28	admitted	23/07/2024	9:00 am-12:30 am	on-site	Innovative Cryogenic Microelectronic solutions for Next-Generation Low-Noise Low-Power Nuclear Physics Applications
BELTRAME	MATTEO	9,73	6,00	15,73	not admitted	-	-	-	Cosmological forecasts from the combination of Stage-IV photometric galaxy surveys and the magnification from forthcoming GW observatories.
BENAMER	HICHAM	7,18	2,50	9,68	not admitted	-	-	-	Probing Nuclear Deformation with Advanced Density Functional Theory (DFT) Methods.
BERETTA	ANDREA FILIPPO	13,39	8,75	22,14	admitted	23/07/2024	9:00 am-12:30 am	on-site	Characterization of field theories invariant under Parisi-Sourlas supersymmetry.
BHAT	VIDYASAGAR	11,33	4,00	15,33	not admitted	-	-	-	Dynamics of Giant Molecular Clouds (GMCs) in Interacting Galaxies: Multi-Wavelength Observations.
BIANCHETTI	NICOLA	12,02	8,50	20,52	admitted	23/07/2024	9:00 am-12:30 am	on-site	Dynamical models of cluster members to test the CDM cosmological paradigm.
BIBI	MARIAM	10,42	4,50	14,92	not admitted	-	-	-	Quantum machine learning algorithms for simulating solid-state systems.
BONORI	GUIDO	3,48	8,50	11,98	not admitted	-	-	-	Parisi-Sourlas supersymmetry: localization, uplift and random models.
BREVI	LORENZO	1,00	7,75	8,75	not admitted	-	-	-	Physics-informed Neural Networks on classical and quantum computers to address the solution of partial differential equations of physical interest, especially nuclear systems.
CADEO	LAURA	17,47	9,25	26,72	admitted	23/07/2024	9:00 am-12:30 am	on-site	Studying transport-related aerosol emissions through experimental and modelling cutting-edge approaches.

CAGLIONI	ALICE	11,16	8,25	19,41	admitted	23/07/2024	9:00 am-12:30 am	on-site	Clusters in Light Nuclei at Intermediate Energies.
CARDUCCI	MARCO	10,36	4,00	14,36	not admitted	-	-	-	RESEARCH PROPOSAL-quantum field theory of gravity
CASATI	REBECCA	16,44	9,00	25,44	admitted	23/07/2024	9:00 am-12:30 am	on-site	Quantum Computing for Space Missions Scheduling.
CHIURATO	GIORGIO	12,25	8,00	20,25	admitted	23/07/2024	9:00 am-12:30 am	on-site	Sudakov resummation of event shape variables at high logarithmic accuracy in perturbative QCD.
COLETTA	CLAUDIO	13,29	8,75	22,04	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	CNO solar neutrino directional measurements with the JUNO experiment: calibration and data analysis.
CORIONI	MARTA	11,25	7,00	18,25	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	Predicting the non-linear matter power-spectrum for parametrized modified gravity.
CORTI	ANDREA	15,72	8,50	24,22	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	Statistical Mechanics of Attention Layers in Deep Neural Networks.
CRISTOFARO	ANTONIO	10,92	6,25	17,17	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	Generalized symmetries, anomalies and quantum gravity.
D'AQUINO	ILARIA	10,65	4,00	14,65	not admitted	-	-	-	Coronal properties in Active Galactic Nuclei (AGN).
D'ORONZO	ANTONELLO	12,45	6,25	18,70	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	General-relativistic physics with torsion and non-metricity: Foundational aspects and applications.
DAL FABBRO	LORENZO	16,01	9,50	25,51	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	Investigation of the mechanism of action of ionic liquids on biological membranes and proteins.
DANELUZZO	MARCO	10,90	7,25	18,15	admitted	23/07/2024	2:00 pm-5:30 pm	on-site	Educazione quantistica: un'urgenza culturale. Dagli esperimenti e dalla visualizzazione scientifica ai concetti fondamentali della meccanica quantistica.
DELCARMINE	LUCA	11,88	9,00	20,88	admitted	25/07/2024	9:00 am-12:30 am	on-site	Non-classicality in Continuously Monitored Open Quantum Systems
DHOLE	DEVESH PRADIPRAO	11,50	3,00	14,50	not admitted	-	-	-	Formation and growth of supermassive black holes.
DI PINTO	ANDREA	11,37	7,00	18,37	admitted	25/07/2024	9:00 am-12:30 am	on-site	Ernst Black Holes, in General Relativity and Supergravity.
DINDELLI	LUDOVICO	9,14	3,50	12,64	not admitted	-	-	-	Localization for AdS/CFT correspondence.

FAVREL	JULES	13,21	4,00	17,21	not admitted	-	-	-	Modelling non perturbative QCD effects for hard scattering processes with an analytic coupling approach.
FONTANA	FRANCESCO	14,21	8,25	22,46	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Soft matter physics and the origin of Life: the role of molecular self-assembly in the formation of the first RNA chains.
FORNASIERO	ILARIA	10,36	4,00	14,36	not admitted	-	-	-	Expanding the Research Horizon by Investigating Galaxy Clusters Properties and AGN Feedback with a Multi-wavelength Approach.
FULGHIERI	MICHELE	13,33	4,75	18,08	not admitted	-	-	-	Refinement of the theoretical forecast for muon $g-2$.
GAMBA	SARA	13,90	10,00	23,90	admitted	19/07/2024	2:00 pm-5:30 pm	on-line	Search for Higgs boson pair production in the $\bar{b}\gamma\gamma b$ with the ATLAS detector.
GENNA	DAVIDE	15,57	10,00	25,57	admitted	25/07/2024	9:00 am-12:30 am	on-site	Tracking The Evolution of Nuclear Structure of Neon Isotopes Towards the Island of Inversion at $N = 20$.
GHOLAMI NEZHAD SHEMIRANI	MOHAMMADREZA	14,58	4,00	18,58	not admitted	-	-	-	System for detecting a target material in a sample using liquid crystals.
GOEL	YASHASVEE	9,42	4,50	13,92	not admitted	-	-	-	Towards a New Scheme for Proton Parton Distribution Functions (PDFs).
GRANATA	DANIELE	1,91	4,25	6,16	not admitted	-	-	-	Black holes in supergravity and string theory.
GRAZIANO	FABIO	2,64	4,75	7,39	not admitted	-	-	-	Positronium beam production in the QUPLAS experiment.
GROENENDIJK	EVA DOORTJE ZEE	16,92	9,25	26,17	admitted	19/07/2024	2:00 pm-5:30 pm	on-line	Small-x resummation in proton-proton collisions for Large Hadron Collider phenomenology.
GUERCI	FRANCESCO PAOLO	12,72	7,00	19,72	admitted	25/07/2024	9:00 am-12:30 am	on-site	Estimation of First Arrival Times Using a Quantum Speed Limit-Based Approach.
GUIDOLIN	FRANCESCO	11,22	8,00	19,22	admitted	25/07/2024	9:00 am-12:30 am	on-site	The fate of very massive stars: Hypernovae, Superluminous supernovae with SoXS.
HASHAM	MUHAMMAD ASIF	13,67	4,00	17,67	not admitted	-	-	-	Research Topic Performance Optimization of n-SnO ₂ -CH ₃ NH ₃ SnI ₃ -NiO-p Perovskite Solar Cells.

HASSAN	HASEEB	11,58	3,00	14,58	not admitted	-	-	-	Radiative Cooling of Doubly Ionized Species in Heated Upper Atmospheres of Potentially Habitable Exoplanets Around M Dwarfs.
HOSSAIN	ASLAM	16,21	8,25	24,46	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Computational Study of Surface Interactions for Enhanced Hydrogen Storage: A First-Principles Comparative Analysis of N-Heterocyclic Carbenes on Cu(111), Au(111), and Ag(111) Substrates.
HOSSEINNEZHAD	AMIRHOSSEIN	17,05	7,25	24,30	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Free-Electron Laser bases on two fold acceleration and arc compressor.
HOURIA	FATIMA	15,82	9,50	25,32	admitted	25/07/2024	9:00 am-12:30 am	on-site	Development of new hybrid scintillators for future neutrino experiments.
HVARING	GIACOMO RICCARDO	12,37	8,25	20,62	admitted	25/07/2024	9:00 am-12:30 am	on-site	Experimental Studies on Quantum Vortex Dynamics in Superfluids of Ultracold Fermionic Li-6 Atoms.
IQBAL	TAYYAB	13,75	1,00	14,75	not admitted	-	-	-	MASTER THESIS
JANKOWSKI	PATRYK	9,91	8,00	17,91	not admitted	-	-	-	Investigation of temporal radial drift evolution in protoplanetary discs of intermediate mass stars.
KURMANOVA	ZHULDYZAY	17,16	4,00	21,16	not admitted	-	-	-	Biodegradable Proteinoid Polymer Nanoparticles for Antipsychotic Drug Delivery: Drug Loading and Cell Membrane Interaction.
LAURORA	NICCOLO	14,97	9,25	24,22	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Exploring the field of Quantum Machine Learning.
MADDALONI	FRANCESCA SAVERIA	18,94	8,75	27,69	admitted	18/07/2024	3:00 pm-5:30 pm	on-site	Innovative approaches in Photon-Counting CT: characterization and development of front-edge applications.
MAINERI	GIULIA	16,24	9,75	25,99	admitted	18/07/2024	3:00 pm-5:30 pm	on-site	Search for dark photons from Higgs boson decays with data collected by the ATLAS detector during the Run 3.
MALANGA	LORENZO ALESSIO	14,17	9,50	23,67	admitted	18/07/2024	3:00 pm-5:30 pm	on-site	Developing a next level population synthesis model to reproduce the observed demographics of protoplanetary discs.
MANTEGAZZA	FABIO	16,42	7,25	23,67	admitted	18/07/2024	3:00 pm-5:30 pm	on-site	Exact results on the strong dynamics of interacting and confining gauge theories.

MARCANTONIO	FRANCESCO	11,57	6,75	18,32	admitted	18/07/2024	3:00 pm-5:30 pm	on-site	Realization of Anti-de Sitter and de Sitter Vacua with Supergravity.
MARCELLI	ALESSANDRO	10,16	4,00	14,16	not admitted	-	-	-	Probing the nature of dark energy through N-body cosmological simulations.
MARUFFI	EDOARDO	11,06	4,00	15,06	not admitted	-	-	-	Monte Carlo Technique for Physics Beyond Standard Model.
MASCHERPA	CHIARA	11,57	9,25	20,82	admitted	19/07/2024	9:00 am-12:30 am	on-site	Phase transitions for Black Holes: an answer from Holography.
MAULE	RICCARDO	10,12	4,00	14,12	not admitted	-	-	-	Investigating Primordial Black Holes and Stochastic Gravitational Waves.
MEDUNTSEVA	NATALYA	13,58	2,50	16,08	not admitted	-	-	-	Chemical complexity in a young Class I protostellar disk.
MEGALIZZI	SILVIA	12,21	9,00	21,21	admitted	19/07/2024	9:00 am-12:30 am	on-site	Enhancing Lung Cancer Diagnosis and Treatment: Integrating Radiomics with High-Resolution Micro-CT/MRI Imaging Techniques.
MIZINTSEVA	ANNA	1,29	7,75	9,04	not admitted	-	-	-	Exploring Multifunctional Magnetic Nanostructures for Theranostics and Combined Therapy.
MOHAMED	OMER	16,83	4,00	20,83	not admitted	-	-	-	Utilization of Neutron Activation Analysis to Investigate the Yield of Activation Products in Construction Materials of Former Nuclear Power Plants.
MUNIR	ANUM	14,75	4,50	19,25	not admitted	-	-	-	Study of Graphene, Graphene-Based Devices and its Potential Applications for Molecular Switches.
NARVAEZ HERNANDEZ	ROBERTO	15,38	8,50	23,88	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Reinforcement Learning as a tool for Quantum Control in digital quantum computation.
NAVONI	ANDREA	12,35	8,00	20,35	admitted	19/07/2024	9:00 am-12:30 am	on-site	Simulation of quantum contextuality via classical resources.
PALINI	LUCA	15,18	9,50	24,68	admitted	19/07/2024	9:00 am-12:30 am	on-site	Algoritmi di clustering, lossless compression e A.I. tramite FPGA ed eFPGA per front-end di rivelatori in fisica delle alte energie.
PANICHI	GIORGIO	0,94	5,50	6,44	not admitted	-	-	-	Advancements in Quantum Physics-Informed Neural Networks (QPINNS) for Solving Complex Scientific and Engineering Problems.

PAPAGNI	GIACOMO	8,21	6,50	14,71	not admitted	-	-	-	Page-Wootters mechanism: toward a relational time in quantum mechanics.
PASSERI	DANIELA	12,73	8,50	21,23	admitted	19/07/2024	9:00 am-12:30 am	on-site	Irraggiamento di Modelli Tumoralari su Chip per lo Studio della Radioresistenza nel Tumore al Pancreas.
PAUL	SIVASISH	13,13	2,50	15,63	not admitted	-	-	-	Understanding the Dark Side of The Universe with the Present and Future Astronomical Surveys.
PETROSYAN	ALEKSANDR	10,25	7,50	17,75	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Development of a Lorentz-invariant theory of dissipative systems.
PISTOLESI	ANDREA	13,74	7,25	20,99	admitted	19/07/2024	9:00 am-12:30 am	on-site	Problemi di Estremizzazione in AdS/CFT.
PORCARI	ALESSANDRO	15,42	7,50	22,92	admitted	19/07/2024	9:00 am-12:30 am	on-site	Computation of the ϵ_r parameter at the second order in the electroweak theory.
RABIA	RIMSHA	15,29	3,50	18,79	not admitted	-	-	-	Carbon Nanostructures and nanotechnologies used in Energy Storage Sensors.
RADICE	STEFANO	10,51	9,75	20,26	admitted	19/07/2024	2:00 pm-5:30 pm	on-site	Developing neuromorphic computing and receptron networks towards edge computing application.
RASO	LEONARDO	11,92	7,25	19,17	admitted	19/07/2024	2:00 pm-5:30 pm	on-site	Development of Semiclassical Methods for Quantum Dynamics.
RIANI	CECILIA	16,63	8,50	25,13	admitted	19/07/2024	2:00 pm-5:30 pm	on-site	Optimizing the Benefit/Risk Ratio in Cancer Diagnosis and Radiotherapy Using Deep Learning Methods.
ROMANO	NICOLO'	11,91	6,25	18,16	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Riduzione dimensionale di Scherk-Schwarz generalizzata e soluzioni comuni in teorie in diverse dimensioni.
RONCOLI	GIOVANNI	11,06	9,00	20,06	admitted	19/07/2024	2:00 pm-5:30 pm	on-site	Bohm-Aharonov Effect Using Antiprotons in Asacusa Experiment.
ROTELLA	NICOLO	9,91	4,00	13,91	not admitted	-	-	-	Multiwavelength study of the phoenix source in Abell 795: investigating particle acceleration mechanisms.
SAJJAD	AHMED	13,13	3,50	16,63	not admitted	-	-	-	Utilization of Ag-Cu-MWCNTs Alloy Doped with Oleic Acid as a Biosensor for Enhanced Detection Applications.
SALA	GABRIELE FRANCESCO	15,68	9,00	24,68	admitted	22/07/2024	9:00 am-12:30 am	on-site	Resummation of low-qt divergences in the azimuthal asymmetries of hadronic processes.

SANTINI	GIANLUCA	13,86	7,00	20,86	admitted	22/07/2024	9:00 am-12:30 am	on-site	Analisi della farmacodinamica dell'acido rosmarinico nei confronti di oncoproteine K-Ras e progettazione di derivati ad elevata affinità.
SCHIAVONE COLERE	FEDERICO GIOVANNI BATTISTA	10,96	4,50	15,46	not admitted	-	-	-	Ampliamento della rete di telescopi SOLARIS: osservazioni solari dall'emisfero nord.
SCHLUCK	JONATHAN	14,61	7,00	21,61	admitted	19/07/2024	2:00 pm-5:30 pm	on-line	Optimized Hamiltonian learning for ferromagnetic many-qubit systems.
SHAH	VARUN	10,50	6,75	17,25	admitted	18/07/2024	9:00 am-1:30 pm	on-line	Timing Based Spin and Mass Measurements of Neutron Star X-Ray Binaries: Applying the Relativistic Precession Model.
SOAVE	ALESSANDRO	14,46	9,00	23,46	admitted	22/07/2024	9:00 am-12:30 am	on-site	The interplay of chemistry and dynamics at the dawn of planet formation.
SPIRITO	EMANUELE	17,16	4,50	21,66	not admitted	-	-	-	Explaining dark matter and the muon anomalous magnetic moment.
STEGANI	BRUNO	13,93	9,00	22,93	admitted	22/07/2024	9:00 am-12:30 am	on-site	Shedding light on microtubule assembly and disassembly at atomistic resolution with ensemble structure based model.
TANVEER	MUHAMMAD SOHAIB	11,86	8,50	20,36	admitted	22/07/2024	9:00 am-12:30 am	on-site	Shedding light on photocatalysts.
THAKKAR	PAARTH	14,40	8,50	22,90	admitted	18/07/2024	9:00 am-1:30 pm	on-line	QCD and EW corrections at the LHC.
TOGNOCCHI	FRANCESCO	11,26	8,00	19,26	admitted	22/07/2024	9:00 am-12:30 am	on-site	Dynamics and Excitations of Strongly Interacting Quantum Many-Body Systems with Neural Network Quantum States.
TONINI	MARTA	14,79	7,50	22,29	admitted	22/07/2024	9:00 am-12:30 am	on-site	Study of the interplay between the nano- and the mesoscale film structure and the electrical transport in nanostructured gold resistive switching networks.
TRESOLDI	CATERINA	13,87	7,00	20,87	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	A Systematic Search and Future Prospects for Compact Binary Systems in Gamma-Rays.
VIGNATI	ELENA	15,04	9,00	24,04	admitted	22/07/2024	2:00 pm-5:30 pm	on-site	Caratterizzazione sperimentale del trasporto radiativo della luce solare negli strati superficiali del manto nevoso.

The ON-SITE interviews will take place at Aula Polvani at Physics Department, Via Celoria 16-Milano

The ON-LINE interviews will take place on the platform ZOOM by the link <https://zoom.us/my/aula.dottorato> or via the APP ZOOM with ID [aula.dottorato](#). The password will be sent via email.

The Interviews Guidelines are available on the web page <http://phd.fisica.unimi.it/admission/selection/>. All information and results of the oral exams will be available on the same web page

NON-EU Candidates having (serious) problems with the date of interview are requested to communicate it before 15th July to phd@fisica.unimi.it or alberto.vailati@unimi.it

ALL CANDIDATES WILL HAVE TO SHOW THEIR ID DOCUMENT INSERTED IN THE APPLICATION