

**UNIVERSITA' DEGLI STUDI DI MILANO**  
**PUBLIC SELECTION FOR THE ADMISSION TO PH.D SCHOOLS - ACADEMIC YEAR 2022/2023**  
**PH.D SCHOOL IN PHYSICS, ASTROPHYSICS AND APPLIED PHYSICS - XXXVIII CYCLE**  
**Evaluation of the candidates documents and interviews schedule**

<sup>1</sup> 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	project evaluation <sup>1</sup>	curriculum evaluation <sup>1</sup>	total score	outcome	project title	date of interview	interview timing	on-site or on-line
ABRIOLA	DAVIDE	9.0	15.90	24.90	admitted to the oral exam	Test del modello cosmologico standard utilizzando lensing gravitazionale forte e debole in ammassi di galassie.	01/08/2022	9:30 am-1:30 pm	on-site
AFRIDI	ANWAR KHAN	6.0	16.30	22.30	admitted to the oral exam	Nonlinear structures and instabilities in space plasmas.	01/08/2022	2:30 pm-5:30 pm	on-line
AKHTAR	MUHAMMAD HAMZA	5.0	20.00	25.00	admitted to the oral exam	Impact of different ions implantation on surface properties of Mg alloy.	01/08/2022	2:30 pm-5:30 pm	on-line
ALIPOUR	HASSAN	0	20.00	20.00	not admitted for insufficient score	-	-	-	-
ALTILIA	SAMUELE	9.0	20.00	29.00	admitted to the oral exam	Applicazione del momento angolare ottico nella comunicazione quantistica.	02/08/2022	9:30 am-1:30 pm	on-site
AMIN	MUZAMMAL	4.5	15.20	19.70	not admitted for insufficient score	Thermal Simulations for temperature Management in electro-optic devices.	-	-	-
ANANIA	ROSSELLA	8.0	15.50	23.50	admitted to the oral exam	Numerical investigation of the origin of misaligned accretion discs.	02/08/2022	9:30 am-1:30 pm	on-site
ASADOLLAH ZARIF MAHDIZADEH	FARHAD	5.0	20.00	25.00	admitted to the oral exam	Optical Methodologies for Mimics of Antifreeze Proteins.	01/08/2022	2:30 pm-5:30 pm	on-line
BAITIERI	SARA	6.0	17.90	23.90	admitted to the oral exam	Multi-wavelength properties and duty-cycle characterisation of jetted Narrow-line Seyfert 1 galaxies.	02/08/2022	9:30 am-1:30 pm	on-site
BALCONI	LORENZO	8.0	20.00	28.00	admitted to the oral exam	Energy Saving Magnets for Sustainable Research Infrastructure.	02/08/2022	9:30 am-1:30 pm	on-site
BERETTA	MARCO	8.0	15.70	23.70	admitted to the oral exam	Solar neutrino measurement with the first year of JUNO data.	02/08/2022	9:30 am-1:30 pm	on-site
BRAMBATI	MARTINO	8.0	20.00	28.00	admitted to the oral exam	Comprendere la natura della rottura di simmetria in processi di migrazione cellulare.	02/08/2022	9:30 am-1:30 pm	on-site
BULLA	ANDREA CLAUDIO MARIA	4.0	15.00	19.00	not admitted for insufficient score	Measurement of electroweak production of a W boson in association with two jets in proton-proton collisions at $\sqrt{s} = 13$ TeV.	-	-	-
CAPRIOTTI	GIUSEPPE	4.0	13.60	17.60	not admitted for insufficient score	Massive scalar fields as dark matter candidates and dark energy solver.	-	-	-
CATTORETTI	MARGHERITA	7.0	14.90	21.90	admitted to the oral exam	Machine Learning applications in the field of MRI to support clinical decisions.	02/08/2022	2:30 pm-5:30 pm	on-site
CELENLIOGLU	MELIS SEREN	7.5	20.00	27.50	admitted to the oral exam	Interpolation modeling and mapping of environmental radioactivity.	01/08/2022	2:30 pm-5:30 pm	on-line
CERIOLI	ADAMO	0	17.00	17.00	not admitted for insufficient score	The foundation of quantum mechanics and the interplay between quantum theories and gravity.	-	-	-
CESARE	SARA	8.0	18.40	26.40	admitted to the oral exam	Upgrade II of the vertex locator of Lhcb experiment with state-of-the-art technologies developed by the timespot collaboration.	03/08/2022	9:30 am-1:30 pm	on-line
CHALANGARI	FARTASH	7.0	17.20	24.20	admitted to the oral exam	The Effects of Quantum Fluctuations on disordered magnetic systems at zero temperature.	03/08/2022	9:30 am-1:30 pm	on-line
CHATZIGIANNAKIS	DIMITRIOS	7.5	19.20	26.70	admitted to the oral exam	Revealing the Chemical and Thermal Structure of the Atmospheres of Galaxy Groups and Ellipticals.	03/08/2022	9:30 am-1:30 pm	on-line
CHIRCHIR	GABRIEL	0	15.30	15.30	not admitted for insufficient score	Electronic, structural and mechanical properties of FeMnP1-xAx (A = Si, Ga, Ge; x= 0.33 and 1-x = 0.66) as a potential magnetocaloric refrigerant alloy.	-	-	-
CHOUDHURI	SANKALP	4.0	15.80	19.80	not admitted for insufficient score	Evolution of Galaxies and Clusters vis-à-vis their Environments.	-	-	-
CICONALI	GIULIA	8.5	20.00	28.50	admitted to the oral exam	Shape coexistence phenomena in Sn and Cd nuclei: Experimental investigation of excited 0+ states in 110-112Sn and 108Cd nuclei	02/08/2022	2:30 pm-5:30 pm	on-site

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COLORETTI	GUGLIELMO	5.0	20.00	25.00	admitted to the oral exam	Event shapes at NNLO in QCD: a precise study of the Higgs boson at the LHC.	03/08/2022	9:30 am-1:30 pm	on-line
CORBARI	GIACOMO	9.0	20.00	29.00	admitted to the oral exam	Probing the existence of a near-threshold resonance state in $^{11}\text{B}$ via high sensitivity gamma-ray spectroscopy.	02/08/2022	2:30 pm-5:30 pm	on-site
CORTESE	PIETRO	7.0	16.60	23.60	admitted to the oral exam	Timing the merging history of galaxies using nuclear stellar disks.	02/08/2022	2:30 pm-5:30 pm	on-site
COSTANTINI	ANDREA	4.0	15.10	19.10	not admitted for insufficient score	Observational features of (R) models explaining dark energy in the Jordan frame.	-	-	-
CROGNALETTI	GIULIO	4.0	18.50	22.50	not admitted for insufficient score	The role of noise in hybrid quantum-classical graph neural networks.	-	-	-
D	LALITHA	0	13.70	13.70	not admitted for insufficient score	NO TITLE	-	-	-
DANIELE	PIETRO	7.5	16.40	23.90	admitted to the oral exam	Search for resonances in the full diphoton invariant mass range using 300 fb <sup>-1</sup> of pp collisions collected at $\sqrt{s}=13.6$ TeV with the ATLAS detector.	02/08/2022	2:30 pm-5:30 pm	on-site
DE ANGELIS	CAMILLA	7.5	16.90	24.40	admitted to the oral exam	Fixed target collisions at LHC with LHCb.	03/08/2022	9:30 am-1:30 pm	on-line
DECASTRI	DAVIDE	8.5	18.00	26.50	admitted to the oral exam	Development of a novel platform for the coupling of neuromorphic nanostructured devices with semiconductor microtechnology.	02/08/2022	2:30 pm-5:30 pm	on-site
DELLA ROCCA	MATTEO	7.0	19.20	26.20	admitted to the oral exam	Scalar and Gravitational Waves from IEMRIs as probe to test General Relativity and Modified Theory of Gravity.	01/08/2022	2:30 pm-5:30 pm	on-site
DI BEO	LUCA	2.0	20.00	22.00	not admitted for insufficient score	Spacetime With Non-negative Local Mass Density.	-	-	-
FARINA	ANTONIO	8.0	17.00	25.00	admitted to the oral exam	Testing the nature of Dark Energy with cosmic structures and their clustering statistics.	26/07/2022	9:30 am-1:30 pm	on-site
FERRACIN	DAVIDE	9.0	17.40	26.40	admitted to the oral exam	Simulazione classica efficiente di calcolatori quantistici tramite reti tensoriali.	26/07/2022	9:30 am-1:30 pm	on-site
FINARDI	ALICE MARGHERITA	8.0	18.30	26.30	admitted to the oral exam	Exploring the interplay between electronic and phononic degrees of freedom and the role of disorder to address the competition of different long-range orders.	26/07/2022	9:30 am-1:30 pm	on-site
FONTANA	MATTEO	4.0	17.30	21.30	not admitted for insufficient score	Black holes in supergravity and string theory.	-	-	-
FRAZZITTA	ANDREA	8.5	12.50	21.00	admitted to the oral exam	Modelli a fisica ridotta per l'integrazione rapida di Plasma Wakefield Acceleration.	26/07/2022	9:30 am-1:30 pm	on-site
FRISELLA	GUGLIELMO	4.5	18.30	22.80	not admitted for insufficient score	Design of a superconducting gantry for cancer hadrontherapy at CNAO.	-	-	-
FRITTOLE	GUGLIELMO	4.0	16.90	20.90	not admitted for insufficient score	Testing Gravity with Cross-Correlation of Cosmic Microwave Background and Large-Scale-Structures of the Universe.	-	-	-
GAMBINO	CLAUDIO	8.0	20.00	28.00	admitted to the oral exam	Osservabili gravitazionali da ampiezze di scattering in gravita quantistica.	26/07/2022	2:30 pm-5:30 pm	on-line
IBADAT	SIDRA	7.0	20.00	27.00	admitted to the oral exam	Realistic Dielectric Response of Nano vs. Bulk ZnO Composites for Energy Storage Devices: An Optimizing Performance.	26/07/2022	2:30 pm-5:30 pm	on-line
INTRONA	MARGAUX	4.0	15.70	19.70	not admitted for insufficient score	Study on the regularization of the n-body problem.	-	-	-
ISMAEEL	JAVERIA	5.5	19.20	24.70	admitted to the oral exam	Artificial Intelligence assisted analysis of battery electrodes using Laser-Induced Breakdown Spectroscopy.	26/07/2022	2:30 pm-5:30 pm	on-line
ISMAIL	KHAWAR ISMAIL	6.0	20.00	26.00	admitted to the oral exam	First principle study of condensed matters properties for devices applications by using the Density Functional Theory (DFT or experiment techniques).	26/07/2022	2:30 pm-5:30 pm	on-line
JAMALI	MUHAMMAD AWAIS	5.0	19.80	24.80	admitted to the oral exam	Effect of temperature on efficiency of photoelectrolysis to produce hydrogen from solar powered preheated water.	26/07/2022	2:30 pm-5:30 pm	on-line
KAUSHAL	ISHAN	2.0	19.70	21.70	not admitted for insufficient score	Occurrence Rate of Super-Earth Around Binary Star Systems.	-	-	-
KHALID	MUHAMMAD FAZAIL	0	17.70	17.70	not admitted for insufficient score	PERSONAL STATEMENT	-	-	-
KHAN	SAEED ULLAH	5.0	20.00	25.00	admitted to the oral exam	Charged particle motion around black holes immersed in an external magnetic field.	26/07/2022	2:30 pm-5:30 pm	on-line
KLAUSNER	PIETRO	7.5	14.70	22.20	admitted to the oral exam	Consistent and reliable estimates of pinning energies in neutron stars.	03/08/2022	9:30 am-1:30 pm	on-line
KUMAR	GURURAJ	7.5	13.70	21.20	admitted to the oral exam	Spectroscopic study of nuclei at around $A = 120$ , suitable for nucleosynthesis process in stars using Advanced Gamma Tracking Array (AGATA).	28/07/2022	9:30 am-1:30 pm	on-line

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KUMARI	GEETU	0	16.70	16.70	not admitted for insufficient score	-	-	-	-
LASRADO	AKHIL	7.5	17.70	25.20	admitted to the oral exam	DISCMINER: Analysis of protoplanetary gas disc structure and kinematics for the detection of exoplanets.	28/07/2022	9:30 am-1:30 pm	on-line
LINDE	DENNIS	6.5	15.10	21.60	admitted to the oral exam	Computing the galaxy power spectrum in the effective field theory of Large-Scale structures for cosmologies beyond LCDM.	28/07/2022	9:30 am-1:30 pm	on-line
MAFFEZZOLI FELIS	STEFANO	7.0	15.60	22.60	admitted to the oral exam	Zero Emission Green Energy Line (ZEGEL).	26/07/2022	2:30 pm-5:30 pm	on-line
MAGGIO	LUCA	6.5	15.80	22.30	admitted to the oral exam	Decay and Propagation Simulations in 2D Waveguides Lattice.	26/07/2022	9:30 am-1:30 pm	on-line
MAGISTRELLI	FABIO	7.5	20.00	27.50	admitted to the oral exam	Hydrodynamics of quantum fluid mixtures: Ginzburg - Landau model and applications to neutron stars.	27/07/2022	9:30 am-1:30 pm	on-site
MAHRAJ	ISSAM	4.0	16.30	20.30	not admitted for insufficient score	Investigation of electronic and topological properties of 2D topological insulators HgTe quantum wells from density functional theory.	-	-	-
MARIOTTI	PIETRO	5.5	14.30	19.80	admitted to the oral exam	The QUPLAS Quantum Revival experiment.	28/07/2022	9:30 am-1:30 pm	on-line
MASSIDDA	ANTHONY	4.5	15.70	20.20	not admitted for insufficient score	Scattering Amplitudes and Intersection Theory.	-	-	-
MELLI	ESTER	7.0	16.00	23.00	admitted to the oral exam	As simple as possible, but not simpler": from experiments to the axioms of Quantum Mechanics, across mathematics, visual representations and manipulations.	27/07/2022	9:30 am-1:30 pm	on-site
MICHELI	SILVIA	5.0	19.30	24.30	admitted to the oral exam	Constraining Primordial Gravitational Waves with future Cosmic Microwave Background experiments.	27/07/2022	9:30 am-1:30 pm	on-site
MOLTENI	RICCARDO	7.5	17.20	24.70	admitted to the oral exam	Implementation of Reservoir Computing on a circuital quantum computer.	27/07/2022	9:30 am-1:30 pm	on-site
NADALINI	GIACOMO	7.5	18.70	26.20	admitted to the oral exam	Development of in-sensing computing devices on unconventional substrates for edge-data processing tasks.	27/07/2022	9:30 am-1:30 pm	on-site
NASELLA	LAURA	7.5	20.00	27.50	admitted to the oral exam	Measurement of the Higgs boson mass with the ATLAS detector.	27/07/2022	9:30 am-1:30 pm	on-site
ORLANDO	FEDERICO	6.0	18.40	24.40	admitted to the oral exam	Ab initio simulations of 2D materials with point defects.	27/07/2022	2:30 pm-5:30 pm	on-site
PACICCO	MATTIA	6.0	14.00	20.00	admitted to the oral exam	Modelling superbubble feedback in high-resolution simulations.	27/07/2022	2:30 pm-5:30 pm	on-line
PANTIRI	MATTIA	6.5	14.10	20.60	admitted to the oral exam	General Relativity effects on galaxy clustering and peculiar velocities in LCDM cosmology and fifth force theories.	27/07/2022	2:30 pm-5:30 pm	on-site
PARENTE	LUCA	4.5	14.00	18.50	not admitted for insufficient score	Improving the study of the topological susceptibility in full QCD at high temperature with lattice Monte Carlo algorithms.	-	-	-
PAVAN	FABRIZIO	6.0	16.40	22.40	admitted to the oral exam	Competition between pairing and condensation in a two-dimensional Bose-Fermi mixtures, described with a many-body diagrammatic T-matrix approach.	28/07/2022	9:30 am-1:30 pm	on-line
PAVICIC	LOVRE	7.5	19.00	26.50	admitted to the oral exam	Precision physics in the High Luminosity Phase of the CERN Large Hadron Collider and at future electron-positron colliders.	27/07/2022	2:30 pm-5:30 pm	on-site
PEDICILLO	EDOARDO	7.5	16.20	23.70	admitted to the oral exam	Quantum Generative Adversarial Networks for HEP.	27/07/2022	2:30 pm-5:30 pm	on-site
PELARGONIO	SARA	7.5	16.50	24.00	admitted to the oral exam	Fluctuation theorems and thermodynamic uncertainty relations for non-Markovian classical and relativistic driven systems.	28/07/2022	9:30 am-1:30 pm	on-line
PLUGERS	DAVEY	7.5	15.20	22.70	admitted to the oral exam	The effects of MHD winds on planetary growth, migration and evolution of the protoplanetary disc.	29/07/2022	2:30 pm-5:30 pm	on-line
POMPA	FRANCESCO	6.5	16.10	22.60	admitted to the oral exam	Measuring the Migdal effect in argon.	29/07/2022	2:30 pm-5:30 pm	on-line
PRISCO	RENATO MARIA	5.0	20.00	25.00	admitted to the oral exam	Development of loop-tree duality methods for the automated computation of physical cross sections at NNLO and beyond.	27/07/2022	2:30 pm-5:30 pm	on-site
RANUCCI	CLAUDIO	4.5	15.10	19.60	not admitted for insufficient score	A comprehensive analysis of tensions and anomalies in the standard model of cosmology, and constraints on new physics beyond the $\Lambda$ CDM from current and upcoming cosmological data.	-	-	-
ROBBIATI	MATTEO	8.0	14.30	22.30	admitted to the oral exam	Hardware-compatible optimization methods for quantum machine learning.	28/07/2022	2:30 pm-5:30 pm	on-site
SALA	ALESSANDRO	7.5	17.20	24.70	admitted to the oral exam	Search for supersymmetric higgsinos using soft displaced tracks with Run-2+Run-3 data collected by the ATLAS detector.	28/07/2022	2:30 pm-5:30 pm	on-site
SALAM	QAZI MAAZ US	4.5	15.80	20.30	not admitted for insufficient score	Model Building and Phenomenology Beyond Standard Model.	-	-	-

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SANFILIPPO	LORENZO	7.0	16.00	23.00	admitted to the oral exam	Low-level and Infrastructure Software for the ATLAS Phase-II Central Trigger System.	28/07/2022	2:30 pm-5:30 pm	on-site
SECCI	GIACOMO	8.5	20.00	28.50	admitted to the oral exam	Advances in Integrated Electronics for the Next-Generation Nuclear and Subnuclear Physics Experiments.	28/07/2022	2:30 pm-5:30 pm	on-site
SHAFIEI	ALI	2.0	15.60	17.60	not admitted for insufficient score	Research Project: Splitting, measurement, and conditional acceptance of the modes for distillation of weakly entangled states	-	-	-
SYED SULAIMAN	KALITH MOHAMED ISMAIL	6.0	18.00	24.00	admitted to the oral exam	Mathematical modelling and Molecular Dynamics simulation of multiscale agent based models of biofabricated nephron tissue.	29/07/2022	2:30 pm-5:30 pm	on-line
TABARRONI	LUCA	4.5	16.40	20.90	not admitted for insufficient score	Black holes as quantum bound states.	-	-	-
TERUZZI	PAOLO	9.0	20.00	29.00	admitted to the oral exam	Collazione delle documentazioni relative ai reattori nucleari, ai depositi di ordigni bellici e allo stato dei trattati sul disarmo per l'aggiornamento della didattica della fisica moderna nei Licei.	28/07/2022	2:30 pm-5:30 pm	on-site
TESORO	MARCO	8.0	16.00	24.00	admitted to the oral exam	Many-Body Entanglement in Strongly Correlated Quantum Systems.	28/07/2022	2:30 pm-5:30 pm	on-site
TESTA	ALESSANDRO	6.5	17.10	23.60	admitted to the oral exam	Supersymmetric localization in Super-Yang-Mills theories.	01/08/2022	2:30 pm-5:30 pm	on-line
TIPANLUISA SARCHI	WILMER BOLIVAR	4.0	9.80	13.80	not admitted for insufficient score	Development of experimental and modelling advanced approaches for the study of atmospheric aerosol properties and sources.	-	-	-
UMAIR UL HASSAN	MUHAMMAD	6.0	12.90	18.90	admitted to the oral exam	Water splitting by photo (electro) catalysis.	26/07/2022	9:30 am-1:30 pm	on-line
UR REHMAN	ZOHAIB	5.0	20.00	25.00	admitted to the oral exam	Electrochemical Study of Advance symmetric/ Perovskite Structured Electrodes for Next-Generation Solid Oxide Fuel Cell.	29/07/2022	2:30 pm-5:30 pm	on-line
VALIZADEH	ALIREZA	4.5	15.80	20.30	not admitted for insufficient score	Statistical analysis beyond the conventional Ising model using the Random Matrix Theory, in and out of equilibrium.	-	-	-
VALSECCHI	ADALBERTO	7.0	16.90	23.90	admitted to the oral exam	Un approccio stocastico alla dinamica eco-evolutiva delle comunità microbiche.	01/08/2022	2:30 pm-5:30 pm	on-line
VEUTRO	ALESSANDRO	6.0	19.40	25.40	admitted to the oral exam	Modelling the impact of the Galactic magnetic field on cosmic rays propagation accounting for spatial deflections and temporal delays.	01/08/2022	9:30 am-1:30 pm	on-site
VIGL	MATTHIAS	7.5	20.00	27.50	admitted to the oral exam	Search for Dark Photon (gd) from Higgs decay $H \rightarrow ggd$ with data collected by the ATLAS experiment at LHC.	01/08/2022	9:30 am-1:30 pm	on-site
ZAFAR	MARIA	6.5	20.00	26.50	admitted to the oral exam	Nanostructured materials with potential for energy production, conversion and storage applications: synthesis and characterization.	29/07/2022	2:30 pm-5:30 pm	on-line
ZALLIO	LUIGI	6.5	14.80	21.30	admitted to the oral exam	The global stability of disk galaxies: considerations and guidelines for the identification of a unique global disk stability criterion.	01/08/2022	9:30 am-1:30 pm	on-site
ZANETTI	ANDREA	6.0	17.10	23.10	admitted to the oral exam	AdS/CFT: New gravitational predictions from subleading analyses in the holographic dual conformal field theory.	01/08/2022	9:30 am-1:30 pm	on-site
ZANONI	MARIAPAOLA	6.0	12.10	18.10	admitted to the oral exam	Analysis of slingshot tails in the CHEX-MATE sample.	01/08/2022	9:30 am-1:30 pm	on-site
ZAREI OSHTOLAGH	HOSSEIN	6.0	17.10	23.10	admitted to the oral exam	xomoon Parameter Estimation Using Neural Networks and TTV Data.	29/07/2022	2:30 pm-5:30 pm	on-line

**The ON-SITE interviews will take place at Sala Consiglio, 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](mailto: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 daily 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 26th July to [phd@fisica.unimi.it](mailto:phd@fisica.unimi.it) or [silvia.leoni@unimi.it](mailto:silvia.leoni@unimi.it)*

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