



UNIVERSITÀ DEGLI STUDI DI MILANO  
DIPARTIMENTO DI FISICA

COMPETITION FOR ADMISSION TO DOCTORATE SCHOOL IN PHYSICS, ASTROPHYSICS AND APPLIED PHYSICS  
XXXVII<sup>TH</sup> CYCLE - PON SCHOLARSHIPS - A.Y. 2021/2022

**Evaluation criteria (curriculum): up to 20 points**

**a. Academic career: up to 16 points**

The overall university career is assessed, taking into account both the Bachelor and Master degree programs, the presence of honors. For foreign candidates, judgment criteria are applied coherently with the academic systems where they gained their qualifications.

**b. Publications: up to 1 points**

The publications are evaluated, also in the preprint mode.

**c. Research and other titles and experiences: up to 3 points**

Any professional experience, the achievement of awards and scholarships, Conference talk and the attendance of schools and refresher courses are evaluated.

**Evaluation criteria (Research Project): up to 10 points**

The submitted project will be evaluated considering its clarity and logical internal coherence, also with reference to the state of the art, and the relevance of the candidate contribution.

**EVALUATION OF DOCUMENTS SUBMITTED**

Candidate	Project	Curriculum	Total	Result
ADNAN MUHAMMAD	8,0	15,0	23,0	admitted to the oral exam
ALBANESE ELISA	7,0	14,0	21,0	admitted to the oral exam
ASLAM MUHAMMAD JEHANZAIB	7,0	11,0	18,0	admitted to the oral exam
AZARPOUR AFSHIN	5,0	11,0	16,0	admitted to the oral exam
CARBONE ANTONIO	10,0	13,0	23,0	admitted to the oral exam
FATIMA ISHRAT	8,0	12,0	20,0	admitted to the oral exam
IMRAN MUHAMMAD	6,0	12,0	18,0	admitted to the oral exam
MORRONE DANIELE	10,0	12,0	22,0	admitted to the oral exam
NISAR JAMSHED	6,0	12,0	18,0	admitted to the oral exam
PHAN HONG PHUOC	9,0	13,0	22,0	admitted to the oral exam
RAFIQUE RIZWAN	6,0	11,0	17,0	admitted to the oral exam
SELLA BART ELEONORA	10,0	14,0	24,0	admitted to the oral exam
TERUZZI LUCA	10,0	18,0	28,0	admitted to the oral exam
VILLEGAS MARTINEZ BRAULIO	6,0	16,0	22,0	admitted to the oral exam
ZANCHI MARCO	9,0	15,0	24,0	admitted to the oral exam
ZULKARNAIN RAJA	6,0	10,0	16,0	admitted to the oral exam

o 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.

**CALENDAR OF ORAL EXAMINATIONS**

The 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 rules of the oral exam have been specified in the email sent from the Committee President.

Monday 15<sup>th</sup> November 2021 - from 10:30 am to 12:30 am of the Milan time-zone

N°	candidate	project title
1	ADNAN MUHAMMAD	First-principles study of the structural, thermodynamic, electronic and optical properties of the Bi and metastable 5-5 phase of ZnO under pressure.
2	ALBANESE ELISA	Searching for a Near-Threshold Resonance State in 11B as a Probe of the Rare B--Delayed Proton Emission Process.

N°	candidate	project title
3	ASLAM MUHAMMAD JEHANZAIB	Ground State Hanle Effect (GSHE) under the Dual Resonance Magnetometry.
4	AZARPOUR AFSHIN	NO TITLE
5	CARBONE ANTONIO	Sviluppo di architetture di distribuzione di alimentazione elettrica ad alta efficienza energetica basate su dispositivi GaN e SiC.
6	FATIMA ISHRAT	Numerical Study of Peristalsis in Complex Fluids.
7	IMRAN MUHAMMAD	Development of energy efficient electrical power distribution architectures based on GaN and SiC devices.
8	MORRONE DANIELE	Assessing the steady state properties of a non-Markovian quantum collisional model.

**Monday 15<sup>th</sup> November 2021 - from 2:00 pm to 4:00 pm of the Milan time-zone**

N°	candidate	project title
1	NISAR JAMSHED	Synthesis of metal/metal oxide nanostructure for energy storage/sensing and many other potential applications.
2	PHAN HONG PHUOC	A comparative study on the effect of internal- and external- junctions nanofiber on H2S and NO2 gases sensing performance.
3	RAFIQUE RIZWAN	NO TITLE
4	SELLA BART ELEONORA	Sviluppo di materiali polimerici attivi ecocompatibili per la realizzazione di sensoristica e valvole fluidiche da inserire in modelli anatomici complessi per la sperimentazione chirurgica senza uso di modelli animali.
5	TERUZZI LUCA	Integrated Optical Characterization of Aeolian Dust in Polar and Alpine Cryosphere and in Atmospheric Aerosols to Improve the Understanding of Climate-Regulating Processes.
6	VILLEGAS MARTINEZ BRAULIO MISAEL	Ising-type Hamiltonians in nonequilibrium quantum systems.
7	ZANCHI MARCO	Predicting the failure of glasses by neural networks.
8	ZULKARNAIN RAJA	Device for Local Heat-mediated intraCELLular delivery (Cell-DHL).

The President of the Committee  
Prof. Stefano Zapperi