



UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI FISICA

COMPETITION FOR ADMISSION TO DOCTORATE SCHOOL IN PHYSICS, ASTROPHYSICS AND APPLIED PHYSICS
XXXIVTH CYCLE - A.Y. 2018/2019

Evaluation criteria (curriculum): up to 20 points

a. Academic career: up to 20 points

The Committee takes into account the grade point average throughout the academic career, including the final grade and honors. The number of semesters spent to obtain the degree is also taken into account. Non-italian candidates are evaluated keeping into the peculiarities of their academic systems.

b. Publications: up to 5 points

c. Research and/or professional experience: up to 5 points

Evaluation criteria (Research Project): up to 10 points

The committee assesses projects according to the following criteria: clarity, conciseness, logical structure; novelty and relevance; originality and importance of the candidate's role.

EVALUATION OF DOCUMENTS SUBMITTED

Candidate	Curriculum	Project	Total	Result
ACCORTO Giacomo	17.58	8.50	26.08	Admitted
ADEEL Muhammad Adeel	4.00	4.00	-	Not Admitted
AHMED Ahmed	4.00	2.00	-	Not Admitted
BANFI Serena	19.52	8.50	28.02	Admitted
BASHTA Ina Paris	5.54	4.00	-	Not Admitted
BERTULETTI Margherita	5.04	4.00	-	Not Admitted
BIAVA Nadia	9.52	2.00	-	Not Admitted
BISWAS Shubhen	4.00	2.00	-	Not Admitted
BOCANEGRA Johan	4.00	4.00	-	Not Admitted
BONALDO Luca	17.40	8.00	25.40	Admitted
BORRA Francesco	19.84	8.50	28.34	Admitted
CALABRESE Ludovico	18.43	8.50	26.93	Admitted
CELANI Sara	19.11	8.50	27.61	Admitted
CHIOCCHETTA Caterina	18.15	9.00	27.15	Admitted
CICOLARI Davide	17.53	8.75	26.28	Admitted
COSTANTINI Giovanni	4.00	4.00	-	Not Admitted
COSTENIERO Cristina	4.00	4.00	-	Not Admitted
COVA Filippo	17.99	9.50	27.49	Admitted
DE MARCO Mario	9.00	2.00	-	Not Admitted
DE TOMA Vincenzo	4.00	4.00	-	Not Admitted
DI LEO Simone	18.91	9.00	27.91	Admitted
DI LUCA Andrea	4.52	4.00	-	Not Admitted
DIAN Gabriele	9.52	2.00	-	Not Admitted
ERBA Vittorio	20.00	9.00	29.00	Admitted
FANFANI Valentina	9.00	2.00	-	Not Admitted
FERRANTI Francesca	17.15	8.50	25.65	Admitted
FRANCO Luca	19.75	8.00	27.75	Admitted
GAIJAN Mrunali	18.53	8.50	27.03	Admitted
GAVASSINO Lorenzo	20.00	9.00	29.00	Admitted

Candidate	Curriculum	Project	Total	Result
GEBBIA Francesca	18.48	9.00	27.48	Admitted
GERETTI Samuele	5.03	4.00	-	Not Admitted
IOVENITTI Simone	20.00	10.00	30.00	Admitted
KARIMAN Behjat Sadat	5.54	4.00	-	Not Admitted
LONGO Piersilvio	4.52	4.00	-	Not Admitted
LUTSENKO Evgenii	19.26	9.50	28.76	Admitted
MACCOLINI Serena	20.00	8.75	28.75	Admitted
MAGNI Chiara	19.63	9.00	28.63	Admitted
MANDELLI Stefano	16.89	8.75	25.64	Admitted
MANUZZI Daniele	20.00	9.50	29.50	Admitted
MARCHINI Naomi	18.29	8.25	26.54	Admitted
MARIANI Saverio	20.00	9.50	29.50	Admitted
MASHA Eliana	16.68	9.00	25.68	Admitted
MAVER Leonardo	4.00	2.00	-	Not Admitted
MELE Lorenzo	20.00	9.50	29.50	Admitted
MELONI Simone	20.00	8.75	28.75	Admitted
MICHELETTI Daniele	5.04	4.00	-	Not Admitted
MIRZAD Golnar	4.00	4.00	-	Not Admitted
MOLINELLI Simone	20.00	8.50	28.50	Admitted
MORETTI Francesco	4.00	4.00	-	Not Admitted
MOUSAVI SAVADKOUHI Nasim	4.00	4.00	-	Not Admitted
MUNGO Davide Pietro	19.78	9.50	29.28	Admitted
MURTAZA Ghulam	5.03	2.00	-	Not Admitted
MUSCOLINO Federica	16.03	8.50	24.53	Admitted
OMATI Andrea	4.00	4.00	-	Not Admitted
PARADISO Simone	18.74	10.00	28.74	Admitted
PIAZZONI Marco	19.94	9.00	28.94	Admitted
PINERES Luis	4.00	4.00	-	Not Admitted
PORZIO Carlotta	20.00	10.00	30.00	Admitted
PREVIDI Anita	17.40	9.50	26.90	Admitted
RABEMANANJARA Tanjona	20.00	10.00	30.00	Admitted
RAVASIO Claudia	17.70	9.50	27.20	Admitted
RAVAZZANO Linda	17.36	9.25	26.61	Admitted
RAZZOLI Luca	19.91	10.00	29.91	Admitted
RIDOLFI Riccardo	20.00	9.50	29.50	Admitted
RINALDI Lisa	18.60	9.25	27.85	Admitted
SACCHI Andrea	19.34	8.50	27.84	Admitted
SACCHI Matteo	20.00	8.00	28.00	Admitted
SALVAGGIO Chiara	18.49	9.00	27.49	Admitted
SARAGNESE Marco	19.24	8.75	27.99	Admitted
SARONNI Luca	5.03	4.00	-	Not Admitted
SAVORANA Giovanni	20.00	8.50	28.50	Admitted
SELLAM Sara	18.60	8.25	26.85	Admitted
SPINICCI Luca	18.94	8.25	27.19	Admitted
SUERRA Edoardo	18.40	8.75	27.15	Admitted
TENTORI Alessandro	16.71	9.50	26.21	Admitted
TONONI Andrea	17.89	8.50	26.39	Admitted
TOSCANI Martina	19.47	9.25	28.72	Admitted
TOSO Valerio	17.85	8.75	26.60	Admitted
TRISCARI Giuseppe Ilario	18.75	8.25	27.00	Admitted
URGNANI Rossella	17.94	8.50	26.44	Admitted
URTASUN ELIZARI Jesus	18.16	10.00	28.16	Admitted
VALENTE Riccardo Umberto	17.16	9.00	26.16	Admitted
VERZA Giovanni Alberto	4.00	4.00	-	Not Admitted
VILLA Sara Moon	18.11	8.50	26.61	Admitted
ZAPPARRATA Orazio	17.20	8.75	25.95	Admitted
ZILIANI Sara	19.60	9.25	28.85	Admitted

CALENDAR OF ORAL EXAMINATIONS

Candidates having (serious) problems with the schedule below are requested to communicate as soon as possible with the PhD secretary (phd@fisica.unimi.it) and the President of the Committee (stefano.forte@mi.infn.it), suggesting a new date and/or time.*

Thursday 21st June 2018 - h. 9:00 am - Sala Polvani

N°	candidates	project title
1	RAVASIO Claudia	Study of Ice Core Dust with Digital In-Line Holography.
2	RAVAZZANO Linda	Modeling the motion of active biological matter in complex environments.
3	RAZZOLI Luca	Properly designed two-dimensional continuous-time quantum walks for quantum transport.
4	RIDOLFI Riccardo	Track reconstruction, fragment identification and TDAQ system in the FOOT experiment for Hadrontherapy.
5	RINALDI Lisa	Development and optimization of radiomic techniques on CT and MR images.
6	SACCHI Andrea	Exploring the role of stellar rotation in Tidal Disruption Events.
7	SACCHI Matteo	Dualities in Low Dimensional Quantum Field Theories.
8	SALVAGGIO Chiara	NS vs BH: who wins? Investigating the nature of the compact objects powering ULXs.

Thursday 21st June 2018 - h. 4:30 pm - Sala Polvani

N°	candidates	project title
1	SARAGNESE Marco	Methods for the computation of gauge theory amplitudes.
2	SAVORANA Giovanni	Non-equilibrium Casimir-Like forces in colloidal suspensions.
3	SUERRA Edoardo	Sviluppo della macchina laser di BriXS per la generazione di raggi X tramite Compton back-scattering all'interno del progetto MariX.

Thursday 21st June 2018 - h. 6:00 pm (Italy Time Zone) Skype Interviews

N°	candidates	project title
1	SELLAM Sara	Test of Lepton Flavour Universality using semileptonic decays of the B_s meson with LHCb detector.

Friday 22nd June 2018 - h. 9:00 am (Italy Time Zone) Skype Interviews

N°	candidates	project title
1	GAIJAN Mrunali	Black holes in the theory of supergravity and strings.
2	LUTSENKO Evgenii	R&D of a rad-hard fast timing pixel detector.
3	RABEMANANJARA Tanjona Radonirina	Next-to-Leading Order Correction to the Multiplicity Distribution of Radiative Gluons in Quark-Gluon Plasma via the Maximally Helicity Violating Techniques.

Friday 22nd June 2018 - h. 11:00 am - Sala Polvani

N°	candidates	project title
1	TENTORI Alessandro	Toward the measurement of the gravitational properties of antimatter.
2	TONONI Andrea	Berezinskii-Kosterlitz-Thouless phase transition and Supersolidity in dipolar bosonic ultracold atoms.
3	TOSCANI Martina	Gravitational Waves from hot accretion discs and their detection by the Laser Interferometer Space Antenna (LISA).
4	MAGNI Chiara*	Design of an accelerator-based BNCT clinical facility: structural and operational optimization.

Friday 22nd June 2018 - h. 2:00 pm - Sala Polvani

N°	candidates	project title
1	SPINICCI Luca*	Using tokamak symmetries to model plasma edge instabilities.
2	URTASUN ELIZARI Jesus	Electroweak Supersymmetry searches with many b-jets at LHC.
3	VALENTE Riccardo Umberto	Studio dei disturbi per isteresi superconduttiva e ottimizzazione elettromagnetica per il dipolo da 16 T del Future Circular Collider.
4	VILLA Sara Moon	Development and electro-mechanical characterization of a monolithic piezoelectric nanogenerator for energy harvesting applications.
5	ZAPPARRATA Orazio	Auger Prime - Studio e analisi della composizione dei raggi cosmici di energia estrema attraverso l'upgrade dell'Osservatorio Pierre Auger.
6	ZILIANI Sara	Gamma-decay from near-threshold unbound states in ^{14}C as a probe of nuclear clustering.

Friday 22nd June 2018 - h. 6:30 pm (Italy Time Zone) Skype Interviews

N°	candidates	project title
1	BONALDO Luca*	Innovative and traditional approaches to the study of QCD for precision physics at hadron colliders.

Monday 25th June 2018 - h. 9:00 am - Sala Polvani

N°	candidates	project title
1	ACCORTO Giacomo	Derivation and applications of a microscopic nuclear density functional theory.
2	BANFI Serena	Simulating Dust Distribution in Warped Protoplanetary Discs: Grid and SPH Codes Compared in View of ALMA and SPHERE Observations.
3	BORRA Francesco	Meccanica statistica della generalizzazione e dell'apprendimento supervised e unsupervised nelle reti neurali.
4	CALABRESE Ludovico	Statistical mechanics of component systems: theory and inference of dependency structures.
5	CELANI Sara	Study of the Higgs boson production in association with a top quark pair with the ATLAS detector at CERN.
6	CHIOCCHETTA Caterina	Testing Large Angle Cosmic Microwave Background Anomalies.
7	CICOLARI Davide	Application of MRI relaxation times maps for diagnostic and dosimetric purposes.

Monday 25th June 2018 - h. 2:00 pm - Sala Polvani

N°	candidates	project title
1	COVA Filippo	Probing the Most Energetic Electrons in Galaxy Clusters with NuSTAR.
2	DI LEO Simone	From external flow moving trapped colloidal particles to particles inducing flow: game of cause and effect.
3	ERBA Vittorio	Il problema dell'Assegnazione Euclidea 1D: dalla biofisica alla complessità computazionale.
4	FERRANTI Francesca	A comparative study of B anomalies and Non Standard Neutrino Interactions.
5	URGNANI Rossella*	Dispersione e deposizione di aerosol atmosferico da combustione residenziale a biomassa in ambiente alpino.
6	GAVASSINO Lorenzo	Effects of general relativity on glitch theory.
7	GEBBIA Francesca	Quantum probes for quantum technology.
8	IOVENITTI Simone	New calibration processes in high precision CMB polarization measurements.
9	MACCOLINI Serena	Measurement of the mixing parameters of neutral charm mesons and search for indirect CP violation with $D_0 \rightarrow K_S p \bar{p}$ decays at LHCb.

Tuesday 26th June 2018 - h. 9:00 am - Sala Polvani

N°	candidates	project title
1	TOSO Valerio*	Ricerca diretta di materia oscura tramite l'esperimento Sabre: analisi del segnale e sviluppo di una tecnologia innovativa.
2	MANDELLI Stefano	Studio dell'utilizzo di sensori di tipo KIDs per misure di fondo cosmico a microonde.
3	MANUZZI Daniele	Study of b -hadrons semileptonic decays as a function of q^2 at LHCb.
4	MARCHINI Naomi	Studio della coesistenza di forma negli isotopi di Sr e Zr con $A=96$ mediante misure di eccitazione Coulombiana.
5	MARIANI Saverio	Cosmic interactions with the LHCb experiment at CERN: antimatter production in pHe collisions.
6	MASHA Eliana	Carbon burning in stars - Underground measurements of the $^{12}C + ^{12}C$ fusion reaction at stellar energies.
7	MELE Lorenzo	Testing Capabilities of the QUBIC Experiment and Analysis of Spurious Polarization.
8	FRANCO Luca*	Precision Higgs Physics and search for Physics Beyond the Standard Model with the Higgs Boson decaying into two photons with the ATLAS experiment at LHC.

Tuesday 26th June 2018 - h. 2:00 pm - Sala Polvani

N°	candidates	project title
1	MELONI Simone	Test of lepton flavour universality with charged current transitions at the LHCb experiment.
2	MOLINELLI Simone	Quantum Phase Transitions in Bose and Fermi Soft Systems.
3	MUNGO Davide Pietro	Measurement of Higgs boson production cross sections in the diphoton decay channel with full Run 2 data of pp collisions at $(s)^{1/2} = 13$ TeV with the ATLAS detector.
4	MUSCOLINO Federica	A Double-Copied Approach to Supersymmetry Breaking.
5	PARADISO Simone	Beyond Planck: delivering state-of-the-art observation of the microwave sky from 30 to 70 GHz for the next decade.
6	PIAZZONI Marco	Innovative fabrication approaches for the development of 3D bio-hybrid robots.
7	PORZIO Carlotta	Evolution of shape coexistence along the Ni isotopic chain: Experimental investigation of the excited structures in ^{62}Ni and ^{64}Ni nuclei.
8	PREVIDI Anita	Nano- and microscale fabrication and characterization of engineered neural networks.
9	TRISCARI Giuseppe Ilario*	Calcolo di contributi $O(\alpha_s)$ alla sezione d'urto di produzione di un singolo bosone di gauge massivo.

The candidate will be asked to present his research proposal. The candidate will have 12 minutes for his presentation, followed by about five minutes of questions, and will use a blackboard. The use of the overhead projector is not allowed.

The President of the Committee
Prof. Stefano Forte