UNIVERSITÀ DEGLI STUDI DI MILANO
DIPARTIMENTO DI FISICA

COMPETITION FOR ADMISSION TO DOCTORATE SCHOOL IN PHYSICS, ASTROPHYSICS AND APPLIED PHYSICS
XXXII$_{nd}$ CYCLE - A.Y. 2016/2017

EVALUATION OF DOCUMENTS SUBMITTED

Candidate	Curriculum	Project	Total	Result
ALI MOHAMED	9.53	7.00	16.53	NOT admitted
ALONSO GONZALES JAVIER	8.02	6.50	14.52	NOT admitted
AURELI SIMONE	11.34	7.00	18.34	Admitted
AZZOLA MATTEO SIMONE	10.09	7.50	17.59	Admitted
BARTOLINI LORENZO	10.34	6.75	17.09	Admitted
BASHIRI SHADI	---	---	---	NOT admitted for negative result of English TEST
BASILICO DAVIDE	16.85	9.00	25.85	Admitted
BETTI ALESSANDRO	14.72	8.50	23.22	Admitted
BIGI CHIARA	14.24	8.50	22.74	Admitted
BOCCIOLETTI LUCA	10.73	5.50	16.23	Admitted
BOTTARDI CARLO	13.75	6.00	19.75	Admitted
CALAMIDA ALESSANDRO	---	---	---	NOT admitted for absence of English TEST
CANGEMI LORIS MARIA	13.68	9.00	22.68	Admitted
CAPOZZI EMILIA	9.93	9.00	18.93	NOT admitted
CAPRIOLI SILVIA	15.69	8.50	24.19	Admitted
CHENNAVAJHULA PRAVEEN	8.95	8.00	16.95	NOT admitted
CHESI GIOVANNI	11.82	8.00	19.82	Admitted
CHISTE' ELENA	13.07	8.00	21.07	Admitted
COLABRARO RICCARDO FRANCESCO	11.40	8.50	19.90	Admitted
CREMONESI LLORENÇ	15.32	9.00	24.32	Admitted
DANESI STEFANO	10.72	8.50	19.22	Admitted
DE LUCA GIUSEPPE BRUNO	14.42	7.50	21.92	Admitted
DELODOVICI FRANCESCO	12.08	8.50	20.58	Admitted
DI GIOACCHINO ANDREA	17.37	9.00	26.37	Admitted
DWIVEDI SAURAV	6.73	4.50	11.23	NOT admitted
EDERA PAOLO	12.99	8.25	21.24	Admitted
ELALAILY TOSSON	9.60	6.00	15.60	NOT admitted
ESPOSITO EMILIA	---	---	---	NOT admitted for negative result of English TEST
FATTI GIULIO	10.85	8.50	19.35	Admitted
GILIBERTI ELIA	13.65	8.50	22.15	Admitted
GIUDICI FABIO	10.36	7.50	17.86	Admitted
INCARDONA FEDERICO	15.54	9.00	24.54	Admitted
KOHANDEL MAHSA	11.41	7.00	18.41	Admitted
LEGRAMANDI ANDREA	16.43	8.00	24.43	Admitted
MACARONE PALMIERI ADRIANO	7.69	6.00	13.69	NOT admitted
MANUZZO ROBERTO	---	---	---	NOT admitted for absence of English TEST
MARANGOTTO DANIELE	16.05	8.50	24.55	Admitted
MARTONE RENATO	13.53	6.50	20.03	Admitted
MIGLIORINI LORENZO	14.32	9.00	23.32	Admitted
MILANS DEL BOSCH GUILLERMO	10.63	5.00	15.63	Admitted
MOTTI FEDERICO	14.28	7.50	21.78	Admitted
MURRONE ALESSIA	14.39	9.00	23.39	Admitted
NAYERHODA AMID	---	---	---	NOT admitted for absence of English TEST
PANDIT RISHIKESH	10.20	9.00	19.20	Admitted
PELLICCIOLI GIOVANNI	16.41	8.00	24.41	Admitted

Candidate	Curriculum	Project	Total	Result
RABBANI MUHAMMAD WAQAS	8.66	5.00	13.66	NOT admitted
RESCIGNO UMBERTO	13.14	7.50	20.64	Admitted
RIGHI GIULIA	13.31	8.00	21.31	Admitted
RIGOSELLI MICHELA	15.25	8.00	23.25	Admitted
ROSSINI LORENZO	13.84	8.50	22.34	Admitted
SAEED MUHAMMAD	6.06	4.00	10.06	NOT admitted
SALVATORI GIULIO	16.63	7.50	24.13	Admitted
SANAVIO CLAUDIO MASSIMILIANO	9.23	8.50	17.73	NOT admitted
SOBOTTKA HANNES	8.66	8.00	16.66	NOT admitted
STEPANIAN ARMAN	9.50	7.00	16.50	NOT admitted
TETTAMANTI AGOSTINO	14.71	7.50	22.21	Admitted
TOFFANETTI JACOPO NICOLÒ	12.62	8.50	21.12	Admitted
UBEIRA GABELLINI MARIA GIULIA	13.21	9.00	22.21	Admitted
VALENTINI SARA	16.14	7.50	23.64	Admitted

CALENDAR OF ORAL EXAMINATIONS

Wednesday 20th July 2016- h. 9:00 am - Sala Polvani

N°	candidates	project title
1	AURELI Simone	Sviluppo di un peptide biomimetico per contrastare l'espansione degli idrocarburi in acqua.
2	AZZOLA Matteo Simone	Compattifiazione e dualità tra teorie di supergravità e teorie di campo.
3	BARTOLINI Lorenzo	Neutron electric dipole moment in holographic QCD.
4	BASILICO Davide	La ricerca del neutrino sterile con l'esperimento SOX.
5	BETTI Alessandro	Confinement problem and non-linear sigma models.
6	BIGI Chiara	Understanding the properties of the topological surface states.
7	BOCCIOLETTI Luca	Measurement of Target Fragmentation for Proton Therapy applications.
8	BOTTARDI Carlo	The MicroMegas detector in view of the ATLAS upgrade.
9	CANGEMI Loris Maria	Charge transport in organic semiconductors: theory and simulation.
10	CAPRIOLI Silvia	Spettroscopia di precisione dei neutrini solari dal ciclo pp del Sole e ricerca dei neutrini dal ciclo CNO con i dati di fase-II dell'esperimento Borexino.

Wednesday 20th July 2016 - h. 2:00 pm - Sala Polvani

N°	candidates	project title
1	CHESI Giovanni	Performance of displaced-squeezed states in noisy phase-shifted keyed realistic m-nary channels.
2	CHISTE' Elena	Gel and glass transitions in chitin nanocrystals colloidal suspensions: exploring mechanical and optical properties.
3	COLABRARO Riccardo Francesco	Applications for minimal surfaces in string and gauge theories via holography.
4	CREMONESI Llorenç	Caratterizzazione ottica di aggregati di nanoparticelle e studio degli effetti determinati dalla loro struttura interna.
5	DANESI Stefano	Ingegnerizzazione delle proprietà fisiche di Nanomesh di Grafene attraverso la tecnologia dei copolimeri a blocchi.
6	DE LUCA Giuseppe Bruno	Geometry of supersymmetry in ten and eleven dimensions.
7	DELODOVICI Francesco	Structural and electronic properties of graphene and graphene-like structures: understanding the interplay between structural deformation, electronic bands and charge/spin transport.
8	DI GIOACCHINO Andrea	From the fractional quantum Hall effect to the topological phases of matter.

Thursday 21st July 2016 - h. 9:00 am - (Italy Time Zone) **Skype Interviews**

N°	candidates	project title
1	KOHANDEL Mahsa	Anisotropic compact objects in general relativity with non-vanishing cosmological constant.
2	MILANS DEL BOSCH Guillermo	Asymptotic Symmetries and BMS Group.
3	PANDIT Rishikesh	Observing the large scale cluster clustering through the "bull's eye".

Thursday 21st July 2016 - h. 10:30 am - Sala Polvani

N°	candidates	project title
1	EDERA Paolo	On the connection between microscopic structure and dynamics and long-time mechanical stability in weak gels.
2	FATTI Giulio	Molecular Dynamics simulations of anisotropic deformations in soft materials.
3	GILIBERTI Elia	Modelling neutron star crust deformation to and radius from glitches and fla ersetsi mate its mass.
4	GIUDICI Fabio	Cosmological test of General Relativity
5	INCARDONA Federico	Design of a bolometric interferometer for the detection of B-mode polarization anisotropies of the cosmic microwave background.
6	LEGRAMANDI Andrea	Geometrical aspects of supergravity vacua.
7	MARANGOTTO Daniele	Search for exotic particles and heavy Majorana neutrinos in beauty baryon decays at LHCb experiment.

Thursday 21st July 2016 - h. 2:00 pm - Sala Polvani

N°	candidates	project title
1	**MARTONE Renato**	Gamma-ray Bursts and the Amati Relation.
2	**MIGLIORINI Lorenzo**	Sviluppo di nanocompositi polimerici, intelligenti e biodegradabili, per stampa 3D di attuatori elettro-meccanici multifunzionali.
3	**MOTTI Federico**	Integration of ferromagnetic layers with 2D transition metal dichalcogenides to realize innovative spintronic devices.
4	**MURRONE Alessia**	Study of CP properties of the Higgs Boson using Vector Boson Fusion events with ATLAS detector.
5	**PELLICCIOLI Giovanni**	Vector Boson Scattering at the LHC.
6	**RESCIGNO Umberto**	A possible, general solution to the Core-Cusp Problem using fermionic dark matter models.
7	**RIGHI Giulia**	L'interazione tra gli steps sulle superfici (110), (101) e (001) di Diossido di Titanio con un approccio ab-initio.
8	**RIGOSELLI Michela**	X-ray variability as a new tool in the study of rotation-powered radio pulsars.

Friday 22nd July 2016 - h. 9:00 am - Sala Polvani

N°	candidates	project title
1	**ROSSINI Lorenzo**	Ricerca dello Squark Top al Run 2 di LHC con il rivelatore ATLAS.
2	**SALVATORI Giulio**	Ampiezze di Scattering e Geometria Algebrica.
3	**TETTAMANTI Agostino**	Il bilancio energetico atmosferico in presenza di aerosol.
4	**TOFFANETTI Jacopo Nicolò**	Capturing proteins in their unfolded state.
5	**UBEIRA GABELLINI Maria Giulia**	Accretion of low mass object in the Orion Nebula Cluster through Hubble Space Telescope photometry.
6	**VALENTINI Sara**	Approcci sperimentali e modellistici integrati per la caratterizzazione del Brown Carbon.

The oral examination consists of an interview to evaluate the candidate's scientific background, ability and aptitude for scientific research. Every candidate will be invited to present on a whiteboard the submitted Research Project in no more than **12** minutes. If necessary, paper copies of diagrams and/or images contained in the Research Project could be used by the candidate as a reference. During the oral examination, the candidate will have to focus on the scientific field related to the research project and on his/her own role in the proposal. The presentation will be followed by some questions by the Committee. The candidate can choose to have the interview either in Italian or in English.

The President of the Committee
Prof. Marco Rinaldo Fedele Bersanelli