

SCIENTIFIC DISCIPLINARY AREA: MATHEMATICS AND INFORMATICS

RESEARCH PROGRAM NO. 1

The assessment criteria for the qualifications and the interview will be affixed on 3.7.2018 at 9.30 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Biblioteca, Piano terra, Via Opera Pia 15, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 3.7.2018 at 12.30 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Biblioteca, Piano terra, Via Opera Pia 15, Genova.

The interview will be held on 3.7.2018 at 14.30 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Biblioteca, Piano terra, Via Opera Pia 15, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Roberto CIANCI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Mathematical methods for the analysis of cyber-physical systems.

Description: The aim of this research is to implement a mathematically well-founded methodology to aid modeling and analysis of Cyber-Physical Systems, i.e., including intertwining physical processes, hardware, software, and communication networks. The expected outcome is the capability to develop and maintaining dependable and secure control software for CPSs, with formal guarantees regarding model execution, combination, and verification. Algorithms will be “ad hoc” developed, with a focus on practically-feasible automation supporting and bridging different phases of the control software lifecycle. This research aims to construct a precise, yet easy to use, methodology to model CPSs and requirements about them, simulate the behavior of such systems, and verify them against requirements.

Scientific disciplinary sector: MAT/07 FISICA MATEMATICA

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Dottorato di Ricerca in Matematica.

Subjects of the interview:

- 1) Methods of physical mathematics.
- 2) Hybrid systems.
- 3) Requirement verification of the software for simulating dynamic systems.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 2

The assessment criteria for the qualifications and the interview will be affixed on 9.7.2018 at 9.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 9.7.2018 at 12.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on 9.7.2018 at 12.30 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

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Scientific coordinator: Prof. Annalisa BARLA

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Understanding structured temporal data with advanced machine learning techniques for focal epilepsies diagnosis.

Description: The work aims to study, develop and test methods of machine learning and statistical inference for the understanding of structured temporal data. The models will first be validated on synthetic data and then applied in the context of the study of biomedical data and, in particular, of focal epilepsies. Particular attention will be paid to the understanding of the networks of variables measured as mutual interaction. Methods based on graphical models are expected to be used also considering the presence of latent variables. Starting from this, we will investigate how to describe the evolution of the network of variables over time.

Scientific disciplinary sector: INF/01 INFORMATICA

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Required degree:

Laurea Specialistica della classe 23/S Informatica.

Laurea Magistrale delle classi: LM-18 Informatica, o LM-66 Sicurezza informatica.

Subjects of the interview:

- Sparsity based regularization methods.
- Graphical models.
- Graphical models with latent variables.
- Minimization techniques.
- High-performance computing and distributed computing.
- Resampling methods.

RESEARCH PROGRAM NO. 3

The assessment criteria for the qualifications and the interview will be affixed on 27.6.2018 at 9.30 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.6.2018 at 13.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on 27.6.2018 at 14.30 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Manuela CHESSA

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 23.250,00

Title: Techniques for interaction in virtual, augmented and mixed reality environments.

Description: Virtual, augmented and mixed reality techniques (VR,AR,MR) allow us to build environments, where real and virtual contents can be combined in several ways, thus allowing various interaction modalities. The main aim of this research activity is to develop methods and techniques to build innovative AR applications, which allow people to: (i) manipulate real objects, eventually sensorized to give haptic and force feedback, enriched by virtual contents; (ii) to walk in enriched environments, where users can interact with virtual objects on the ground plane, and with real objects; (iii) to visualize virtual contents by using wearable devices (optical or video see through) and spatial projection techniques.

Scientific disciplinary sector: INF/01 INFORMATICA

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Required degree:

Laurea Magistrale delle classi: LM-18 Informatica, o LM-21 Ingegneria biomedica, o LM-25 Ingegneria dell'automazione, o LM-32 Ingegneria informatica.

Subjects of the interview:

Fundamentals of Virtual and Augmented Reality; algorithms and techniques for: RGB(-D) camera calibration, camera pose estimation, simultaneous localization and mapping, and hand pose estimation; visual features extraction and tracking; object-oriented programming (C++ and/or C# and/or Java) and game engines (Unreal engine and/or Unity3D).

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 4

The assessment criteria for the qualifications and the interview will be affixed on **3.7.2018** at **9.00** in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **3.7.2018** at **12.00** in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on **3.7.2018** at **15.00** in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Viviana MASCARDI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € ~~23.250,00~~ € 27.133,00*

Title: Use of Computational Logic for Runtime Verification (RV) of Multiagent Systems (MASs), its extensions to Probabilistic Verification, and analysis of the connections between RV (Dynamic Verification) and Model Checking (Static Verification) of MASs.

Description: The scholarship aims at analysing the extension of Runtime Verification (RV) of Multiagent Systems (MASs) techniques presented by Briola et al (2014) and Ancona et al (2017) with probabilistic approaches inspired to Stoller et al (2011). Another expected outcome is the description of the connections between RV and Model Checking of MASs and the design of a prototype integrating them.

References

D. Ancona, A. Ferrando, V. Mascardi: Parametric Runtime Verification of Multiagent Systems. AAMAS, 2017

D. Briola, V. Mascardi, D. Ancona: Distributed Runtime Verification of JADE and Jason Multiagent Systems with Prolog. CILC, 2014

Stoller, S.D., Bartocci, E., Seyster, J., Grosu, R., Havelund, K., Smolka, S.A., Zadok, E.: Runtime verification with state estimation. RV, 2011

Scientific disciplinary sector: INF/01 INFORMATICA

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Required degree:

Laurea Magistrale della classe LM-18 Informatica.

Subjects of the interview:

- Multiagent Systems.
- Runtime Verification.
- Computational Logics.

The candidate will need to prove his/her knowledge of the English language.

* Amended with Rectoral Decree. n. 2654 dated 12.6.2018.

RESEARCH PROGRAM NO. 5

The assessment criteria for the qualifications and the interview will be affixed on 10.7.2018 at 11.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 12.7.2018 at 11.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on 12.7.2018 at 17.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Lorenzo Rosasco on the phone number +39 0103536607 or via the email address: lorenzo.rosasco@unige.it.

Scientific coordinator: Prof. Lorenzo ROSASCO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Machine learning approaches to signal classification and representation.

Description: Extracting actionable information from massive amount of complex high dimensional data is a key problem in science and engineering. The goal of this project is to develop sound machine learning algorithms that can provably tackle this challenge. Specifically we will consider a multidisciplinary approach based on tools from computer science, signal processing and optimization to develop efficient and optimal learning techniques with computational requirements tailored to the information in the data. We will work to take advantage of invariances and structures in the data. The goal is to derive results leading to better understanding of available techniques, but also to develop novel algorithmic solutions with improved statistical accuracy and reduced computational footprint.

Scientific disciplinary sector: INF/01 INFORMATICA

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Required degree:

Dottorato di ricerca in Matematica e Applicazioni.

Subjects of the interview:

- Machine Learning.
- Optimization.

RESEARCH PROGRAM NO. 6

The assessment criteria for the qualifications and the interview will be affixed on 26.6.2018 at 10.00 in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.6.2018 at 19.00 in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The interview will be held on 11.7.2018 at 9.00 in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Marco Pallavicini on the phone number +39 0103536661 or via the email address: marco.pallavicini@unige.it.

Scientific coordinator: Prof. Marco PALLAVICINI

NO.1 research fellowship – Duration 2 years – Annual pre-tax amount: € 27.133,00

Title: Antiproton cooling with negative ions and pulsed anti-hydrogen beam formation.

Description: The research activity will take place within the AEgIS project aiming at a measurement of the Earth's gravitational acceleration g on a beam of cold anti-hydrogen. The recent developments about the manipulations of antiprotons and positrons in AEgIS indicate that antiproton cooling via collisions with simultaneously trapped negative ions laser cooled is the most promising method to get the necessary sub K antiproton temperature. The use of positronium formation target operating in transmission mode is also becoming feasible. The proposed research activity consists in designing an antiproton trapping system integrating these two new aspects. They will allow to get the necessary low $p\bar{p}$ temperature and antiH production rate. The research activity also includes the study of the beam formation and the evaluation of the sensitivity of the g measurement.

Scientific disciplinary sector: FIS/01 FISICA SPERIMENTALE

Place: Dipartimento di Fisica (DIFI)

Required degree:

Dottorato di ricerca in Fisica.

Subjects of the interview:

- Fundamental physics with cold trapped antiprotons and anti-Hydrogen.
- Trapping of charged particles.
- Low energy positronium formation and detection.
- Cooling of trapped particles: methods and limitations.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 7

The assessment criteria for the qualifications and the interview will be affixed on 4.7.2018 at 10.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 4.7.2018 at 13.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

The interview will be held on 4.7.2018 at 14.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Gianguido Ramis on the phone number +39 0103536027 or via the email address: gianguidoramis@unige.it.

Scientific coordinator: Prof. Gianguido RAMIS

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Hydrogen production through photoreforming of carbohydrates.

Description: The activity includes the execution of photocatalytic tests on various materials supplied by other partner research units of the MIUR-PRIN2015 project Heterogeneous Robust Catalysts to Upgrade Low-Value Biomass Streams (HERCULES). The aim is the production of hydrogen from waste biomass or low valued products, for example from hydrolysed cellulosic or lignocellulosic materials. Innovative photoreactors will be used, which will be also designed by the candidate. The data will be elaborated according to an innovative kinetic approach, which includes a model for radiation. Finally, the modelling and design of the photoreactor will be performed.

The performance of the materials will be evaluated not only in terms of productivity, but also robustness, with particular reference to activity tests on real hydrolysed substrates.

Scientific disciplinary sector: CHIM/07 FONDAMENTI CHIMICI DELLE TECNOLOGIE

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:

Dottorato di ricerca in Ingegneria Chimica, o Dottorato di ricerca in Scienze e Tecnologie dei Materiali, o Dottorato di ricerca in Chimica Industriale.

Subjects of the interview:

- Previous research experience.
- Development of photoreactors.
- Photocatalytic materials.
- Photoreforming
- Water Splitting
- CO₂ photoreduction.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 8

The assessment criteria for the qualifications and the interview will be affixed on 9.7.2018 at 9.30 in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Corso Europa 26, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 9.7.2018 at 13.00 in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Corso Europa 26, Genova.

The interview will be held on 9.7.2018 at 14.00 in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Corso Europa 26, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Marco Capello on the phone number +39 01035338143 or via the email address: capello@dipteris.unige.it.

Scientific coordinator: Prof. Marco CAPELLO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Tissue analysis techniques taken from target fish in port environments in order to determine the state of water pollution starting from the accumulation of pollutants. (EU Project Interreg V-A Italy France Maritime 2014-2020 "GEREMIA - Gestione dei reflui per il miglioramento delle acque portuali (Management of wastewater for the improvement of port waters)" - CUP D41I18000600005).

Description: Blue Growth is the long-term path that our territories will have to follow, and the ports will be among the main actors. The evaluation of impacts and anthropogenic pressures on ecosystems will have to be developed on a solid scientific basis as suggested by modern management approaches (e.g., Ecosystem-based Management). Following this approach, pollution risk management must be shared on a transboundary basis. GEREMIA aims to train and support, with innovative tools and solutions, who will be responsible for managing port waters. The harmonization of modeling, monitoring and analysis of risk management procedures will lead to the preparation of a DSS developed specifically for Port. The proposed management strategies will be applied in Pilot Actions on several Port, with installation of bioremediation systems and waste containment, and training of intervention procedures.

Scientific disciplinary sector: GEO/12 OCEANOGRAFIA E FISICA DELL'ATMOSFERA

Place: Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)

Required degree:

Laurea magistrale delle classi: LM-6 Biologia, o LM-60 Scienze della natura, o LM-75 Scienze e tecnologie per l'ambiente e il territorio.

Subjects of the interview:

- Animal tissue sampling techniques.
- Visual analysis of fishes.
- Marine pollution from heavy metals.
- Bio/mycoremediation techniques.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 9

Scientific coordinator: Prof. Pietro BALDELLI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Mechanism of action and application of low-glucose diet to prevent epileptogenesis in models of human genetic epilepsy.

Description:

Goal of this project is pave the way to an anti-epileptogenic strategy based on the low-glucose diet (LGD) and capable to contrast specifically the epileptogenic pathways at the basis of the seizure onset in patients affected by various forms of monogenic epilepsies.

The experimental plan is based on two specific aims: (i) an in vitro investigation of the functional mechanisms underlying the homeostatic effects of compounds mimicking the effects of LGD; (ii) an ex vivo characterization of the efficacy of LGD in reverting the epileptogenic process in two mice models of human monogenic epilepsies, one caused by Na⁺ channel mutations (Channelopathy), the other related to mutations of the synaptic vesicle, Synapsin 2, inducing dysfunctions of synaptic transmission (Synaptopathy).

Scientific disciplinary sector: BIO/09 FISIOLOGIA

Place: Dipartimento di Medicina Sperimentale (DIMES)

Required degree:

Laurea Magistrale della classe LM-9 Biotecnologie mediche, veterinarie e farmaceutiche.

Subjects of the interview:

Master degree (M.Sc) thesis, research experiences and laboratory skills.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 10

The assessment criteria for the qualifications and the interview will be affixed on 27.6.2018 at 9.00 in Policlinico San Martino, IST Nord, Laboratorio di Medicina Rigenerativa, Largo Rosanna Benzi 10, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.6.2018 at 12.00 in Policlinico San Martino, IST Nord, Laboratorio di Medicina Rigenerativa, Largo Rosanna Benzi 10, Genova.

The interview will be held on 27.6.2018 at 14.00 in Policlinico San Martino, IST Nord, Laboratorio di Medicina Rigenerativa, Largo Rosanna Benzi 10, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Aldo PAGANO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: A comprehensive service for in situ monitoring, automatic counting and risk evaluation of toxigenic microalgae.

Description: Aim of the project is to realize new devices and methodologies suitable to monitor phytoplankton organisms onsite and in laboratory that will be characterized by high sensitivity, rapidity and ease to use. The second main objective is to prove the feasibility of comprehensive toxicological information achievement, based on in vitro methods, which could ultimately enhance the current algal monitoring and risk management.

Scientific disciplinary sector: BIO/13 BIOLOGIA APPLICATA

Place: Dipartimento di Medicina Sperimentale (DIMES)

Required degree:

Laurea magistrale delle classi: LM-6 Biologia, o LM-9 Biotecnologie mediche, veterinarie e farmaceutiche, o LM-13 Farmacia e farmacia industriale, o LM-41 Medicina e chirurgia.

Subjects of the interview:

Molecular cell biology techniques.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 11

The assessment criteria for the qualifications and the interview will be affixed on 2.7.2018 at 9.00 in Clinica Malattie Infettive, Ospedale Policlinico San Martino, Padiglione di Patologie Complesse, Piano meno uno, Largo R. Benzi 10, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 2.7.2018 at 12.00 in Clinica Malattie Infettive, Ospedale Policlinico San Martino, Padiglione di Patologie Complesse, Piano meno uno, Largo R. Benzi 10, Genova.

The interview will be held on 2.7.2018 at 13.00 in Clinica Malattie Infettive, Ospedale Policlinico San Martino, Padiglione di Patologie Complesse, Piano meno uno, Largo R. Benzi 10, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Malgorzata MIKULSKA

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Early diagnosis of candidemia: optimization in the use of serum biomarkers.

Description: The main objective of this research is to coordinate a multidisciplinary project for the use and optimization of the diagnosis of candidemia through the use of biomarkers, in order to improve the diagnostic effectiveness and the use of antifungal drugs in patients with suspected candidemia. Overall, it is reasonable to expect, also in light of previous experiences on the combined use of procalcitonin and serum glucan for this purpose, that a coordinated and dynamic multidisciplinary approach might considerably improve, in terms of time and costs, the adequacy of the use of antifungals in daily clinical practice, and the survival of patients with candidemia.

Scientific disciplinary sector: MED/17 MALATTIE INFETTIVE

Place: Dipartimento di Scienze della Salute (DISSAL)

Required degree:

Specializzazione in Malattie Infettive, o Specializzazione in Medicina Tropicale, o Specializzazione in Malattie Infettive e Tropicali, con adeguata produzione scientifica derivante da pubblicazioni su riviste scientifiche in lingua inglese inerenti all'argomento dell'assegno di ricerca: diagnostica della candidemia.

Subjects of the interview:

- Diagnostic principles of candidemia.
- Objectives and outcome measures for the diagnosis of candidemia.
- Different types of biomarkers for the diagnosis of candidemia.

RESEARCH PROGRAM NO. 12

The assessment criteria for the qualifications and the interview will be affixed on 2.7.2018 at 8.30 in Clinica Neurologica, Aula magna, Largo R. Benzi 10, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 2.7.2018 at 12.00 in Clinica Neurologica, Aula magna, Largo R. Benzi 10, Genova.

The interview will be held on 2.7.2018 at 14.30 in Clinica Neurologica, Aula magna, Largo R. Benzi 10, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Flavio NOBILI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Cognitive features related to Lewy Body Diseases in idiopathic REM sleep behavior disorders.

Description: The Idiopathic REM Sleep Behavior disorder (iRBD) is the most frequent parasomnia in REM sleep. Patients with iRBD have a high risk of developing a neurodegenerative disease. Furthermore, the presence of iRBD is a research criterion for the diagnosis of Parkinson's Disease in the prodromal stage. The main aim of the study is to evaluate iRBD subjects to identify predictive markers of synucleinopathies. Clinical and instrumental data will be collected, including video-polysomnography, neuropsychological tests and brain SPECT with I-123 Ioflupane, a marker of the dopamine transporter. Statistical multivariate analysis tool will be used to identify the pattern of markers that better predict the development of synucleinopathies.

Scientific disciplinary sector: MED/26 NEUROLOGIA

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI)

Required degree:

Laurea V.O. in Psicologia.

Laurea Specialistica della classe 58/S Psicologia.

Laurea Magistrale della classe LM-51 Psicologia.

Subjects of the interview:

- The neuropsychological assessment.
- Cognitive profile of synucleinopathies.
- Relationship between cognitive functions and neurotransmitters.
- Basic concepts of Multivariate statistics.

RESEARCH PROGRAM NO. 13

The assessment criteria for the qualifications and the interview will be affixed on **5.7.2018** at **8.00** in Clinica Oculistica, Sala Studio, V Piano, Viale Benedetto XV 5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **5.7.2018** at **11.00** in Clinica Oculistica, Sala Studio, V Piano, Viale Benedetto XV 5, Genova.

The interview will be held on **5.7.2018** at **13.00** in Clinica Oculistica, Sala Studio, V Piano, Viale Benedetto XV 5, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Carlo Enrico TRAVERSO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Path Diagnostic Therapeutic patient suffering from chronic eye diseases associated with aging.

Description: Chronic diseases of the visual system are the leading cause of blindness in the Western world. The progressive lengthening of life, the concomitant presence of metabolic and / or cardiovascular diseases such as diabetes and hypertension and the presence of refractive ocular condition like high myopia are important risk factors. These diseases need a diagnostic and therapeutic approach which can be different. Some ocular diseases need medical treatment (e.g. glaucoma, age related macular degeneration, diabetic retinopathy, retinal venous occlusion and central serous chorioretinopathy).

Scientific disciplinary sector: MED/30 MALATTIE APPARATO VISIVO

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI)

Required degree:

Laurea Specialistica della classe 46/S Medicina e chirurgia.

Laurea Magistrale della classe LM-41 Medicina e chirurgia.

Subjects of the interview:

Major chronic ocular diseases and the ability to perform related instrumental diagnostic procedures.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 14

The assessment criteria for the qualifications and the interview will be affixed on 4.7.2018 at 8.00 in Clinica Oculistica, Sala Studio, V Piano, Viale Benedetto XV 5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 4.7.2018 at 11.00 in Clinica Oculistica, Sala Studio, V Piano, Viale Benedetto XV 5, Genova.

The interview will be held on 4.7.2018 at 13.00 in Clinica Oculistica, Sala Studio, V Piano, Viale Benedetto XV 5, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Carlo Enrico TRAVERSO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Standard Operating Procedures (SOPs) and reference measurements for the standardization of the phenotype in patients affected by forms of primary glaucoma.

Description: The analysis of complex diseases is achievable through the conduct of genetic association projects. Standardization is important to ensure the collection of a uniform set of data from patients suffering from primary glaucoma whose genetic data will be analyzed. In order to ensure homogeneity will be developed Standard Operating Procedures (SOPs) for a detailed clinical examination, together with a training and certification of employees. The complete set of exams includes, in addition to the eye examination, the perimetry and the morphometry of the optic nerve and others. Establish the SOPs and reference measurements for the standardization of the phenotype in patients suffering from primary glaucoma. This will allow to develop a genotype-phenotype database.

Scientific disciplinary sector: MED/30 MALATTIE APPARATO VISIVO

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI)

Required degree:

Laurea Specialistica della classe 46/S Medicina e chirurgia.

Laurea Magistrale della classe LM-41 Medicina e chirurgia.

Subjects of the interview:

Instrumental diagnostic techniques in the ophthalmological field.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 15

The assessment criteria for the qualifications and the interview will be affixed on 4.7.2018 at 9.30 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Istituto “G. Gaslini”, Neurologia Pediatrica e Malattie Muscolari, Padiglione 16, I Piano, Via Gaslini, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 4.7.2018 at 12.30 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Istituto “G. Gaslini”, Neurologia Pediatrica e Malattie Muscolari, Padiglione 16, I Piano, Via Gaslini, Genova.

The interview will be held on 4.7.2018 at 13.00 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Istituto “G. Gaslini”, Neurologia Pediatrica e Malattie Muscolari, Padiglione 16, I Piano, Via Gaslini, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Pasquale STRIANO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 23.250,00

Title: Delineating the molecular pathway and pathogenic mechanism underlying autosomal dominant lateral temporal epilepsy (ADLTE).

Description: Autosomal dominant lateral temporal epilepsy (ADLTE) is a syndrome characterized by seizures with auditory symptoms. Mutations that cause ADLTE are found in the LGI1 and RELN genes expressed in the brain, which altogether have changed in about 50% of families. The aim of the project is to determine the neurobiological dysfunctions associated with mutations in the LGI1 and RELN genes through the study of nerve cells derived from patients fibroblasts through the generation and differentiation of induced pluripotent cells (IPS cells). Toward this aim, IPS cells of patients will be generated by cell reprogramming techniques and differentiated into neuronal cells and analyzed to evaluate the specific morpho-functional characteristics. In particular, a comparative analysis will be conducted to verify arborization, synaptic density, intrinsic excitability and synaptic transmission.

Scientific disciplinary sector: MED/38 PEDIATRIA GENERALE E SPECIALISTICA

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI).

Required degree:

Laurea Magistrale delle classi: LM-6 Biologia, o LM-9 Biotecnologie mediche, veterinarie e farmaceutiche

Subjects of the interview:

- Epilepsy genetics.
- Epileptic encephalopathies.
- Diagnostic techniques in epilepsy.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 16

The assessment criteria for the qualifications and the interview will be affixed on 3.7.2018 at 9.30 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Istituto “G. Gaslini”, Neurologia Pediatrica e Malattie Muscolari, Padiglione 16, I Piano, Via Gaslini, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 3.7.2018 at 12.30 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Istituto “G. Gaslini”, Neurologia Pediatrica e Malattie Muscolari, Padiglione 16, I Piano, Via Gaslini, Genova.

The interview will be held on 3.7.2018 at 13.00 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Istituto “G. Gaslini”, Neurologia Pediatrica e Malattie Muscolari, Padiglione 16, I Piano, Via Gaslini, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Pasquale STRIANO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 23.250,00

Title: Predictors of Cannabidiol clinical response and CNS adverse effects in epilepsy patients.

Description: Over 20 antiepileptic drugs (AEDs) are licensed for its treatment. There is currently no way to predict which patients will not respond to any or all AEDs. We aim to characterize the clinical efficacy and tolerability of Cannabidiol (CBD), an emerging drug for treatment of refractory epilepsy. The anti-epileptic action of cannabinoids is mediated by cannabinoid receptor type 1 (CB1) and 2 (CB2), although a variety of other receptors and targets are also involved in the effects of these compounds. Some candidate genes to predict the CBD clinical response are the following: CB1/2, TPV1-4, TRPA1, TRPM8, 5-HT1a, GPR55. We will investigate whether genetic variants in these genes are associated with different clinical response to CBD in patients with epilepsy. Moreover, we will also investigate whether variations in these genes may increase the risk for adverse effects in CBD-exposed patients.

Scientific disciplinary sector: MED/38 PEDIATRIA GENERALE E SPECIALISTICA

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI).

Required degree:

Laurea V.O. in Medicina e chirurgia.

Laurea Specialistica della classe 46/S Medicina e chirurgia.

Laurea Magistrale della classe LM-41 Medicina e chirurgia.

Subjects of the interview:

- Epilepsy therapy.
- Epileptic encephalopathies.
- Pharmacotherapy.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 17

The assessment criteria for the qualifications and the interview will be affixed on 26.6.2018 at 8.00 in Clinica Neurologica, Largo P. Daneo 3, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.6.2018 at 11.00 in Clinica Neurologica, Largo P. Daneo 3, Genova.

The interview will be held on 26.6.2018 at 15.00 in Clinica Neurologica, Largo P. Daneo 3, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Angelo SCHENONE

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Telerehabilitation and remote control of the rehabilitation program.

Description: Rehabilitation plays a fundamental role in the recovery of patients with acute neurological diseases, as well as in the management of post-acute and chronic phases. The information technologies available are suitable for the remote monitoring of the home rehabilitation protocol and have proved to be effective, in allowing professionals to program exercises at home and ensure that the subjects follow their rehabilitation program. Moreover, although there are several sensors commercially available, it is necessary to select the most suitable ones for this purpose. Therefore, the objectives of the project are to select different tools for the upper and lower limbs, to verify of their effectiveness and to transfer these devices from the hospital to the patient's home.

Scientific disciplinary sector: MED/48 SCIENZE INFERMIERISTICHE E TECNICHE NEURO-PSICHIATRICHE E RIABILITATIVE

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI)

Required degree:

Dottorato di ricerca in Neuroscienze applicate.

Subjects of the interview:

- Rehabilitation.
- Tele-rehabilitation.
- Rehabilitative techniques.
- Neurological diseases.
- Outcome measures.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 18

The assessment criteria for the qualifications and the interview will be affixed on 3.7.2018 at 9.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 3.7.2018 at 12.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on 3.7.2018 at 15.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Alessandro Stocchino on the phone number +39 0103532432 or via the email address: alessandro.stocchino@unige.it.

Scientific coordinator: Prof. Alessandro STOCCHINO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Numerical modelling of pollutant transport within harbours.

Description: In the framework of the european project Iterreg Italia-Francia Marittimo Gestione dei reflui per il miglioramento delle acque portuali, GEREMIA, specific actions regarding the numerical modelling of the sea currents and water quality in the ports of Genova, Olbia, La Spezia and Toulon are planned. The main goal of the present study is to investigate the characteristics of the mass transport occurring in the port waters owing to wave, wind and tides currents. Moreover, the impact of the presence of point discharges within the ports waters will be considered.

Scientific disciplinary sector: ICAR/01 IDRAULICA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:

Dottorato di ricerca in Fluidodinamica, o Dottorato di ricerca in Processi dell'ingegneria ambientale.

Subjects of the interview:

- Fluid mechanics and mass transport.
- Environmental numerical modelling.

RESEARCH PROGRAM NO. 19

The assessment criteria for the qualifications and the interview will be affixed on 2.7.2018 at 9.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 2.7.2018 at 12.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on 2.7.2018 at 15.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Alessandro Stocchino on the phone number +39 0103532432 or via the email address: alessandro.stocchino@unige.it.

Scientific coordinator: Prof. Alessandro STOCCHINO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Numerical modelling of micro-plastic transport.

Description: In the framework of the european project Iterreg Italia-Francia Marittimo Stop alle Plastiche in H2O!, SPLASH!, specific actions regarding the numerical modelling of the sea currents and micro-plastic fate are planned. The main goal of the present study is to investigate the quantity of the micro-plastic currently available in the port waters and the possible impact on the surrounding sea environment. The fate of the micro-plastic will be simulated using specific 2D/3D numerical models taking into account wave, wind and tidal currents.

Scientific disciplinary sector: ICAR/01 IDRAULICA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:

Laurea Magistrale delle classi: LM-23 Ingegneria civile, o LM-35 Ingegneria per l'ambiente e il territorio.

Subjects of the interview:

- Fluid mechanics and mass transport.
- Environmental numerical modelling.

RESEARCH PROGRAM NO. 20

The assessment criteria for the qualifications and the interview will be affixed on 26.6.2018 at 9.00 in Campus di Savona, Palazzina Marchi, Via Magliotto 2, Savona.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.6.2018 at 13.00 in Campus di Savona, Palazzina Marchi, Via Magliotto 2, Savona.

The interview will be held on 26.6.2018 at 16.30 in Campus di Savona, Palazzina Marchi, Via Magliotto 2, Savona.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Luca Ferraris on the phone number +39 019230271 or via the email address: info@cimafoundation.org.

Scientific coordinator: Prof. Luca FERRARIS

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 31.015,00

Title: Development of methodologies for reconstruction of past flood events and analysis of the future hazard and risk scenarios.

Description: The research will be involved in the activities carried out by CIMA within the EFLIP (Economic impacts of flood risk in Lombardy and innovative risk mitigation strategies) project.

The successful candidate will define and test methodologies for reconstruction of flood events and analysis of the future hazard and risk scenarios in a given area. The following activities should be carried out, in cooperation with researchers from the consortium: collect the scattered data on the economic impact of flood events; reconstruct the delimitation of the affected area and replicate the flood characteristics for selected events; analyse patterns of vulnerability, speed of recovery of disrupted production, and improve the flood damage assessment models for past and future flooding events in Lombardy.

Scientific disciplinary sector: ICAR/02 COSTRUZIONI IDRAULICHE E MARITTIME E IDROLOGIA

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Required degree:

Laurea Specialistica delle classi: 28/S Ingegneria civile, o 38/S Ingegneria per l'ambiente e il territorio.

Subjects of the interview:

- Event and risk scenario scenarios.
- Vulnerability models
- Flood impact assessment.
- Damage curves.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 21

The assessment criteria for the qualifications and the interview will be affixed on 16.7.2018 at 8.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 16.7.2018 at 13.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on 16.7.2018 at 14.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Sergio LAGOMARSINO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Comparison among codes methods for the seismic assessment and verification of existing masonry buildings, including the interaction between the out-of-plane and in-plane response.

Description: The research is focused to the systematic and comparative assessment of the seismic safety level guaranteed by the different analysis methods proposed in national and international standards for existing masonry buildings. The attention is focused not only to the nonlinear procedures, that constitute the standard approach in the engineering practice and at research level, but also to the linear approach that in general provide estimations cautionary (strongly underestimating the actual seismic capacity) and pose critical issues still not solved and codified in literature.

Since essential tool for the application of such methods of analysis is a reliable modelling of the existing building, the research also includes deepening inherent the interaction effects between the local mechanisms (mainly associated to the out-of-plane response) and the in-plane response of masonry walls, that are usually neglected in the verification approaches proposed in standards.

Scientific disciplinary sector: ICAR/09 TECNICA DELLE COSTRUZIONI

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:

Laurea Magistrale delle classi: LM-4 Architettura e ingegneria edile-architettura, o LM-23 Ingegneria civile.

Subjects of the interview:

Seismic response of existing masonry buildings; procedures for the seismic assessment of existing masonry buildings, with reference to both linear and nonlinear methods. Experiences of the Candidate that testify expertise and previous activities related to the modelling and seismic analysis of masonry buildings will be properly assessed, together with research activities carried out abroad on similar topics.

RESEARCH PROGRAM NO. 22

The assessment criteria for the qualifications and the interview will be affixed on 27.6.2018 at 9.30 in Dipartimento di Architettura e Design (DAD), Stradone Sant'Agostino 37, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.6.2018 at 12.30 in Dipartimento di Architettura e Design (DAD), Stradone Sant'Agostino 37, Genova.

The interview will be held on 27.6.2018 at 14.30 in Dipartimento di Architettura e Design (DAD), Stradone Sant'Agostino 37, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Andrea VIAN

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Communication Design and Data Visualization for the University of Genoa.

Description: The research aims to study data, storytelling and dynamic identities to develop a communication of the University of Genoa based on the principles of generative design and data visualization.

A communication increasingly tailored and filtered through the digital algorithms, today requires increasing dynamism and resilience. Now more than ever, the data, mirror of reality and source of information, play a key role in building dynamic identity and effective and empathic communication.

To put the data of the University of Genoa to the system, analyzing them and making them usable is necessary not only to have a source of information and a means for problem solving but they also become a problem finding tool, ie they have the inherent ability to anticipate questions, problems and needs that still need to arise.

At this level Data Visualization becomes crucial to anticipate users' needs (students, teachers, technicians, institutions and companies) and to carry out effective, dynamic and tailored communication.

Scientific disciplinary sector: ICAR/13 DISEGNO INDUSTRIALE

Place: Dipartimento di Architettura e Design (DAD)

Required degree:

Dottorato di ricerca in Architettura e design – Curriculum Design.

Subjects of the interview:

- Generative design.
- Data visualization.
- Visual storytelling.
- Design system.
- Dynamic identities.

RESEARCH PROGRAM NO. 23

Scientific coordinator: Prof. Carlo CRAVERO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Models for stability limit prediction in centrifugal compressors.

Description: The ability in the prediction of the instability limit for the operation of a centrifugal compressor is an important issue for design and development of the component. This aspect is of utmost relevance from both scientific and industrial point of view. The topic is still a complicated matter for current simulation approaches and the related impact on design capabilities is very strong. The research activity is aimed at the development of stability limit criteria based on simple and efficient simulation models to be routinely used in the preliminary design phases of the radial turbomachine; well in advance of the full 3D CFD simulations or the experimental analysis in the test rig.

Scientific disciplinary sector: ING-IND/08 MACCHINE A FLUIDO

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Laurea Specialistica della classe 36/S Ingegneria meccanica.

Laurea Magistrale della classe LM-33 Ingegneria meccanica.

Subjects of the interview:

- Centrifugal compressors.
- Instability in operating conditions.
- Simulation models.

RESEARCH PROGRAM NO. 24

Scientific coordinator: Prof. Loredana MAGISTRI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Time-dependent analysis and simulation of advanced energy systems with thermal storage.

Description: The research activities will regard the integration of energy harvesting components thermal power production with already existing heating systems (both at building and DH level), with a specific focus on a suitable control system, and link with thermal storage.

The main objectives of the study are:

- Determining the energy performance at building level via modelling.
- Determining the energy performance at district level.
- Devising an energy management strategy based on the modelling results.
- Constructing a control and management system at district level.
- Selecting the best energy system for different scenarios, stand-alone / grid-coupled.

Finally, the proposed control and management system will be tested on the “Southern Europe Demosite” of the Envision project.

Scientific disciplinary sector: ING-IND/09 SISTEMI PER L'ENERGIA E L'AMBIENTE

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Laurea V.O. in Ingegneria Meccanica.

Laurea Specialistica della classe 36/S Ingegneria meccanica.

Laurea Magistrale della classe LM-33 Ingegneria meccanica.

Subjects of the interview:

- Dynamics and control of energy systems.
- Advanced energy systems.
- Measurements and data acquisition in energy plants.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 25

Scientific coordinator: Prof. Alberto TRAVERSO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Dynamic analysis of compressors in fuel cell gas turbine hybrid systems.

Description: Hybrid systems consisting of the coupling between fuel cells and turbomachinery represent an engineering challenge both from the system study and control point of view. The interaction between such two different systems, characterized by clearly different time scales but which are able to strongly influence each other during operation, arose interest in the research world by a considerable number of years. The in-depth dynamic analysis of each individual component and later of the complete system aims to understand problems, limitations and potentials of the studied system. The possibility of carrying out dynamic analyses both in the simulation environment and through experimental campaigns, thanks to the help of emulators, will guarantee a detailed and reliable study of the possible real plant performance. In particular, the study of stability limits of the compressor, and the maintenance of safe operating margins for the fuel cell, will be studied in the laboratory with a cyber-physical approach, with which, thanks to the interaction between real components and simulated ones, it is possible to mimic the behavior of the real hybrid system.

Scientific disciplinary sector: ING-IND/09 SISTEMI PER L'ENERGIA E L'AMBIENTE

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Laurea V.O. in Ingegneria Meccanica.

Laurea Specialistica della classe 36/S Ingegneria meccanica.

Laurea Magistrale della classe LM-33 Ingegneria meccanica.

Subjects of the interview:

- Dynamics and control of energy systems.
- Advanced energy systems.
- Measurements and data acquisition in energy plants.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 26

Scientific coordinator: Prof. Alberto TRAVERSO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Development and test campaign of sea energy converters.

Description: The activity of this grant will be related to innovative technologies for wave energy conversion. The first part of activity will be a survey on existing technologies, after that a deep evaluation and a development study will be led in order to define a robust technology for flexible applications. The most relevant topics will be on wave energy converter's PTO based on the compression of fluids (water, oil, air), for this reason, both compression technologies and expansion technologies will be extensively investigated. In particular, innovative expansion technologies will be investigated seeking for compact and high performance solutions.

Scientific disciplinary sector: ING-IND/09 SISTEMI PER L'ENERGIA E L'AMBIENTE

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Laurea V.O. in Ingegneria Meccanica.

Laurea Specialistica della classe 36/S Ingegneria meccanica.

Laurea Magistrale della classe LM-33 Ingegneria meccanica.

Subjects of the interview:

Experiences on wave energy converters and physical characteristics of wave motion.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 27

The assessment criteria for the qualifications and the interview will be affixed on 27.6.2018 at 9.00 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Sezione TEC, Via Opera Pia 15A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.6.2018 at 18.00 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Sezione TEC, Via Opera Pia 15A, Genova.

The interview will be held on 28.6.2018 at 9.00 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Sezione TEC, Via Opera Pia 15A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Luca Antonio TAGLIAFICO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 23.250,00

Title: Experimental and numerical analysis focused on the effects of the refrigerant charge on the circuit performance.

Description: The research project will consist of two phases:

- Theoretical analysis and numerical simulations in order to predict, both in static and dynamic regimes, the charge distribution in the plant components for different operative conditions.
- Implementation of an experimental campaign conducted on the refrigerant circuit at DIME-TEC laboratory (Applied Thermal and Fluid Dynamics – TFALab), operating according to a compression vapour cycle, with R134A or R410A refrigerants charge, equipped with temperature, pressure and flow sensors in different locations for the automatic acquisition, in order to evaluate the circuit performance.

Scientific disciplinary sector: ING-IND/10 FISICA TECNICA INDUSTRIALE

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Laurea Magistrale della classe: LM-4 Architettura e ingegneria edile-architettura, o LM-23 Ingegneria civile, o LM-33 Ingegneria meccanica, o LM-35 Ingegneria per l'ambiente e il territorio

Subjects of the interview:

The candidate must demonstrate appropriate experience in the field of refrigeration and refrigerant cycle plants. In particular the candidate must have competences in the following areas:

- Vapour compression refrigeration cycles.
- Static and dynamic simulations of plant components performance.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 28

The assessment criteria for the qualifications and the interview will be affixed on 28.6.2018 at 9.00 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Via Opera Pia 15A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 28.6.2018 at 13.00 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Via Opera Pia 15A, Genova.

The interview will be held on 28.6.2018 at 14.00 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Via Opera Pia 15A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Luigi Carassale on the phone number +39 0103532226 or via the email address: luigi.carassale@unige.it.

Scientific coordinator: Prof. Luigi CARASSALE

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Development of dynamic substructuring techniques with application to experimental measures on scale models of steam-turbine rotor disks.

Description: Rotor disks of steam turbines are composed by the assemblage of several components that interact dynamically. Rotor blades are constrained to the disk by shape-matching attachments pre-stressed by the centrifugal force and blades connected each other by snubbers that are forced by the blade untwist. The modeling of such systems can be carried out by dynamic substructuring techniques enabling the combination of submodels having numerical or experimental origin.

The research activity will be developed at the University of Genova, as well as in Ansaldo Energia. The development of the project may involve trips in Italy and foreign countries.

Scientific disciplinary sector: ING-IND/13 MECCANICA APPLICATA ALLE MACCHINE

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

Required degree:

Laurea Magistrale della classe: LM-17 Fisica, o LM-20 Ingegneria aerospaziale e astronautica, o LM-23 Ingegneria civile, o LM-30 Ingegneria energetica e nucleare, o LM-33 Ingegneria meccanica, o LM-34 Ingegneria navale.

Subjects of the interview:

- Structural dynamics.
- Dynamic substructuring.
- Signal processing.

RESEARCH PROGRAM NO. 29

The assessment criteria for the qualifications and the interview will be affixed on 5.7.2018 at 9.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 5.7.2018 at 12.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

The interview will be held on 5.7.2018 at 14.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Barbara Bosio via the email address: barbara.bosio@unige.it.

Scientific coordinator: Prof. Barbara BOSIO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Detailed simulation of molten carbonate fuel cells.

Description: Molten Carbonate Fuel Cells (MCFCs) can simultaneously generate clean energy and segregate CO₂ from exhausts. To optimise performances in these specific operating conditions, a detailed MCFC model will be developed.

Then, the model has to be integrated in the software Aspen Plus for process simulation. For this reason and in order to compare different computational solutions, two codes will be set-up: in Fortran and in Aspen Modeler. The results will be validated on available experimental data.

Scientific disciplinary sector: ING-IND/24 PRINCIPI DI INGEGNERIA CHIMICA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:

Laurea Magistrale della classe: LM-22 Ingegneria chimica, o LM-28 Ingegneria elettrica, o LM-30 Ingegneria energetica e nucleare, o LM-32 Ingegneria informatica, o LM-33 Ingegneria meccanica.

Subjects of the interview:

- Fuel cells.
- Electrochemical kinetics.
- Mass and energy transport phenomena.
- Programming (i.e. Fortran).
- Process simulation (i.e. Aspen).

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 30

The assessment criteria for the qualifications and the interview will be affixed on **26.6.2018** at **10.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **10.7.2018** at **10.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The interview will be held on **10.7.2018** at **11.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Marco STORACE

NO.1 research fellowship - Duration 2 years – Annual pre-tax amount: € 27.133,00

Title: Development of methods for the design of synthetic Central Pattern Generators for quadrupeds' locomotion control.

Description: The dynamics of each limb must take into account: neural signals produced by a biologically-inspired central pattern generator (CPG), signals coming from supra-spinal networks (brain and hypothalamus), and also sensory feedback pathways.

Main objectives of the research:

- To develop a method, based on analysis and simulation of nonlinear dynamical systems, allowing to design semi-automatically a synthetic CPG, even biologically-inspired.
- To develop a Matlab software that both implements the developed method and allows to simulate the complete locomotion system, accounting for the other signals that determine the quadruped's gait.
- To develop a circuit implementation of the CPG.

Scientific disciplinary sector: ING-IND/31 ELETTROTECNICA

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

Required degree:

Laurea V.O. in Ingegneria Elettronica.

Laurea Specialistica della classe 32/S Ingegneria elettronica.

Laurea Magistrale della classe LM-29 Ingegneria elettronica.

Subjects of the interview:

- Locomotion physiology.
- Nonlinear dynamical models of CPGs.
- Stability analysis.
- Bifurcation analysis.
- Programmable electronic devices.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 31

The assessment criteria for the qualifications and the interview will be affixed on **6.7.2018** at **9.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), 1° Piano, Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **6.7.2018** at **12.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), 1° Piano, Via Opera Pia 11A, Genova.

The interview will be held on **6.7.2018** at **14.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), 1° Piano, Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Francesco Guastavino on the phone number +39 0103532229 or via the email address: francesco.guastavino@unige.it.

Scientific coordinator: Prof. Francesco GUASTAVINO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 23.250,00

Title: Study and characterization of innovative insulating materials and development of measurement systems for the detection of Partial Discharges.

Description: Development and electrical characterization, particularly the study of the behaviour in presence of Partial Discharge activity, of nanostructured materials for electrical insulation, assessing the fundamental parameters. Determination of the synergic effects of thermal and environmental stresses on the insulating properties with the development of appropriate techniques and testing equipment and methodologies. Use of proper models for the data analysing to identify the most performing materials and the factors that lead to the best performances especially as regards the degradation processes in presence of partial discharges.

Scientific disciplinary sector: ING-IND/32 CONVERTITORI, MACCHINE E AZIONAMENTI ELETTRICI

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

Required degree:

Dottorato di ricerca in Ingegneria Elettrica.

Subjects of the interview:

The interview will be based on insulating materials and their physic-chemical characterization. The degradation and the ageing phenomena will be taken into consideration under the action of electrical, mechanical, thermal and environmental stresses acting individually or in synergy among them. Then the variations in time of the characteristic electrical parameters will be considered in case of polymeric materials pure and composites. The interview will be based also on the following topics: Tools and techniques for the measurement of electrical mechanical, thermal and environmental quantities; Measuring systems in high and low frequency for the detection of partial discharges; Aging models; Statistical analysis of the measured data; Scale effects in measurements on samples of laboratory; Testing systems in high voltage; Safety systems for tests at high voltage.

RESEARCH PROGRAM NO. 32

The assessment criteria for the qualifications and the interview will be affixed on 28.6.2018 at 9.30 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 28.6.2018 at 13.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The interview will be held on 28.6.2018 at 16.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Mirco RAFFETTO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 34.898,00

Title: Study and development of innovative methodologies for the design, numerical analysis, and synthesis of unconventional architectures for next generation antenna arrays.

Description: The main objective of the research activity is the study, development, implementation, and numerical validation through ad-hoc and full-wave solvers of innovative technologies for the design and synthesis of unconventional architectures with enhanced-performance array antennas to be used in new generation cellular communication systems (5G), satellite communication systems, and sensing systems. The activity will be focused on analytical and hybrid methodologies for the design of “tiled” architectures, on advanced full-wave numerical simulation strategies able to handle large direct problems, and on innovative techniques (e.g., the exploitation of substrate/superstrates of reconfigurable structures, etc.) to enhance the radiation properties of the systems.

Scientific disciplinary sector: ING-INF/02 CAMPI ELETTROMAGNETICI

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

Required degree:

Dottorato di ricerca in Scienze e tecnologie per l'ingegneria elettronica e delle telecomunicazioni, o Dottorato di ricerca in Informatica e telecomunicazioni, o Dottorato di ricerca Elettronica applicata.

Subjects of the interview:

Methodologies for the simulation and design of unconventional array architectures.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: ANTIQUITIES, PHILOLOGY, LITERARY STUDIES, ART HISTORY

RESEARCH PROGRAM NO. 33

The assessment criteria for the qualifications and the interview will be affixed on 26.6.2018 at 13.30 in Dipartimento di Antichità, Filosofia e Storia (DAFIST), 3° Piano, Via Balbi 6, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.6.2018 at 16.30 in Dipartimento di Antichità, Filosofia e Storia (DAFIST), 3° Piano, Via Balbi 6, Genova.

The interview will be held on 26.6.2018 at 17.00 in Dipartimento di Antichità, Filosofia e Storia (DAFIST), 3° Piano, Via Balbi 6, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Osvaldo Raggio via the email address: osvaldo.raggio@lettere.unige.it.

Scientific coordinator: Prof. Osvaldo RAGGIO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Historical and archaeological characterisation of the rural heritage within the Cinque Terre National Park and of the FAI property Punta Mesco-Case Lovara.

Description: The research concerns the historical transformations of the rural landscape of the Cinque Terre National Park and the FAI property Punta Mesco – Case Lovara. An extensive survey will be carried out, in order to identifying sample areas and sites of interest for the characterisation of past road system, settlement, land use etc.

Sampling and analysis of the artefacts will be carried out by surface archaeology survey (eg. archaeological sampling, shovel test etc.). The archaeological documentation and the different sources will be geolocalized and integrated in a geo-database using a GIS software. GIS analysis output will be elaborated both in visual and in digital format.

Scientific disciplinary sector: L-ANT/08 ARCHEOLOGIA CRISTIANA E MEDIEVALE

Place: Dipartimento di Antichità, Filosofia e Storia (DAFIST)

Required degree:

Dottorato di ricerca in Geografia storica.

Subjects of the interview:

- Methods and sources of the historical-archaeological research.
- Sources for the characterisation of rural landscape.
- Rural Archaeology.
- Historical archaeology.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 34

The assessment criteria for the qualifications and the interview will be affixed on **26.6.2018** at **8.30** in Dipartimento di Antichità, Filosofia e Storia (DAFIST), 3° Piano, Via Balbi 6, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **26.6.2018** at **11.30** in Dipartimento di Antichità, Filosofia e Storia (DAFIST), 3° Piano, Via Balbi 6, Genova.

The interview will be held on **26.6.2018** at **12.00** in Dipartimento di Antichità, Filosofia e Storia (DAFIST), 3° Piano, Via Balbi 6, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Carlo Montanari via the email address: carlo.montanari@unige.it.

Scientific coordinator: Prof. Carlo MONTANARI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Archaeological and environmental characterisation of the rural heritage within the Cinque Terre National Park and of the FAI property Punta Mesco-Case Lovara.

Description: The research focuses on an archaeological and environmental characterisation of rural landscape, terraces, water supply, fire regime and production practices. Main interest is paid to the effects of rural practices on the environmental systems, and the practices evidence registered in the site ecology. Moreover, charcoal production and fire practices (as local environmental resources management system) will be a specific focus of the research. Anthracological analyses (charcoal sample and identification) will be used in order to better characterise this issue.

Scientific disciplinary sector: L-ANT/10 METODOLOGIE DELLA RICERCA ARCHEOLOGICA

Place: Dipartimento di Antichità, Filosofia e Storia (DAFIST)

Required degree:

Dottorato di ricerca in Geografia storica, o Dottorato di ricerca in Ecologia vegetale.

Subjects of the interview:

- Methods and sources of environmental resource archaeology.
- Archaeological and environmental sources for the rural landscape characterization.
- Anthracology.
- Rural landscape history.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 35

The assessment criteria for the qualifications and the interview will be affixed on **27.6.2018** at **10.00** in Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), I Piano, Via Balbi 6, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **27.6.2018** at **13.00** in Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), I Piano, Via Balbi 6, Genova.

The interview will be held on **27.6.2018** at **15.00** in Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), I Piano, Via Balbi 6, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Andrea AVETO

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Online bibliographies of the Twenty-century in Liguria: some examples.

Description: The project aims to enhance the Digital archive of the twentieth century literary, a database accessible online in which the bibliographies of the writings of some of the greatest writers who were born in Liguria in the last century (Eugenio Montale, Giovanni Giudici, Edoardo Sanguineti) have been merged. Starting from the models of the online bibliography of the writings on Eugenio Montale (www.bibliografiamontale.it) and the online bibliography of the writings of Edoardo Sanguineti (www.bibliografiasanguineti.diraas.it), the project intends to enlarge a constellation of instruments, constantly extensible, integrable and updatable, which is a candidate to become a point of reference for the scientific community.

Scientific disciplinary sector: L-FIL-LET/11 LETTERATURA ITALIANA CONTEMPORANEA

Place: Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS)

Required degree:

Dottorato di ricerca in Filologia, interpretazione e storia dei testi italiani e romanzi, o Dottorato di ricerca in Letterature e culture classiche e moderne.

Subjects of the interview:

- Qualifications and publications of the candidate.
- Specific skills in the field of bibliographic research and critical exegesis around authors and texts of literary modernity.

RESEARCH PROGRAM NO. 36

The assessment criteria for the qualifications and the interview will be affixed on 4.7.2018 at 9.00 in Istituto di Glottologia, Via Balbi 4, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 4.7.2018 at 12.00 in Istituto di Glottologia, Via Balbi 4, Genova.

The interview will be held on 4.7.2018 at 12.30 in Istituto di Glottologia, Via Balbi 4, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Rita CAPRINI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Possessive Compounds in Old Norse. A morpho-semantic description and its role in Germanic onomastics.

Description: The research project aims to analyze the compounding process in Old Norse, with a focus on nominal and adjectival possessive compounds. This compositional pattern has some characteristic features which are different from more basic compounds in Germanic and, more generally, in Indo-European. The research aims to analyze the relevant sources and to gather Old-Norse possessive compounds in a corpus, to provide a morphological and semantic analysis and to define their role within Nordic and Germanic onomastics. Another aim will be to explore similarities and differences with onomastic systems found in other Germanic contexts (Goths, Vandals, Longobards, Frisons and Anglo-Saxons).

Scientific disciplinary sector: L-LIN/01 GLOTTOLOGIA E LINGUISTICA

Place: Dipartimento di Lingue e Culture Moderne (DLCM)

Required degree:

Dottorato di ricerca in Linguistica.

Subjects of the interview:

- The structure of compounds in IE languages, and especially in Germanic languages.
- Compounds in Old Norse texts, especially possessive compound, which are often different from those of other Germanic languages.

RESEARCH PROGRAM NO. 37

The assessment criteria for the qualifications and the interview will be affixed on **5.7.2018** at **9.00** in Dipartimento di Lingue e Culture Moderne (DLCM), P.zza S. Sabina 2, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **5.7.2018** at **13.00** in Dipartimento di Lingue e Culture Moderne (DLCM), P.zza S. Sabina 2, Genova.

The interview will be held on **6.7.2018** at **9.00** in Dipartimento di Lingue e Culture Moderne (DLCM), P.zza S. Sabina 2, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Cristiano BROCCIAS

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: English construction grammar(s): Between description and cognition.

Description: The family of approaches collectively known as “Construction Grammar” has nowadays entered the mainstream in cognitive linguistic theory. However, it is often less than clear if the studies carried out within the Construction Grammar framework should be considered, cautiously, as structural descriptions of linguistic facts or, more ambitiously, as psycholinguistic analyses. The goal of the present project is to study, in the specific case of the English language, the notion of construction and evaluate, on the basis of a sample of empirical data drawn from corpora such as COCA, the distinct constructional models proposed in the literature. If necessary, the project also aims to develop an alternative model at least descriptively accurate.

Scientific disciplinary sector: L-LIN/12 LINGUA E TRADUZIONE - LINGUA INGLESE

Place: Dipartimento di Lingue e Culture Moderne (DLCM)

Required degree:

Dottorato di ricerca in Linguistica.

Subjects of the interview:

- Contemporary constructional, cognitive and functional approaches to language/grammar.
- Corpus linguistics.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: HISTORY, PHILOSOPHY, PEDAGOGY AND PSYCHOLOGY

RESEARCH PROGRAM NO. 38

The assessment criteria for the qualifications and the interview will be affixed on 27.6.2018 at 10.30 in Dipartimento di Scienze della Formazione (DISFOR), Corso Podestà 2, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.6.2018 at 13.30 in Dipartimento di Scienze della Formazione (DISFOR), Corso Podestà 2, Genova.

The interview will be held on 27.6.2018 at 14.30 in Dipartimento di Scienze della Formazione (DISFOR), Corso Podestà 2, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Antonella PRIMI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Territory and participative mapping: a strategy for risk resilience in the Bisagno Valley.

Description: The research aims to the developing of an innovative and multidisciplinary strategy for the analysis of hydro-geological risk perception and resilience. The strategy will be bases on the most recent international bibliography, as well as empirical research. The Bisagno Valley (Genoa) has been chosen as case study. The research involves the analysis of sources as historical and current cartographies, crowdsourced data (videos, photos and social media) and interviews. Outputs will be share and discussed with local actors through a participative approach; digital cartographies of territorial changes and risk perception (HGIS – PPGIS) will be developed. Final results will be share as.opendata and scientific report with local institution as Protezione Civile (Civil Protection) and Liguria Region.

Scientific disciplinary sector: M-GGR/01 GEOGRAFIA

Place: Dipartimento di Scienze della Formazione (DISFOR)

Required degree:

Dottorato di ricerca in Geografia storica per la valorizzazione del patrimonio storico e ambientale.

Subjects of the interview:

- International bibliography (geographical, sociological and anthropological) about risk perception.
- Critical GIS and Participatory GIS.
- Bisagno Valley historical and geographical context.
- Analysis of current and official cartography.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 39

The assessment criteria for the qualifications and the interview will be affixed on 26.6.2018 at 10.00 in Dipartimento di Scienze della Formazione (DISFOR), IV Piano, Stanza 4A1, Corso Podestà 2, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.6.2018 at 12.00 in Dipartimento di Scienze della Formazione (DISFOR), IV Piano, Stanza 4A1, Corso Podestà 2, Genova.

The interview will be held on 2.7.2018 at 14.00 in Dipartimento di Scienze della Formazione (DISFOR), IV Piano, Stanza 4A1, Corso Podestà 2, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Maria Carmen USAI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Executive function and early literacy.

Description: This study aims to analyze the cognitive factors involved in the prerequisites for the acquisition of written language in preschool-aged children. The project will involve 4- and 5-year-old children that will be assessed with a battery of tests aimed at evaluating the executive functions, the specific prerequisites for the written language, the general intellectual functioning, and the linguistic abilities. On the basis of the literature examined, it is expected that the executive functions contribute to explain the variability of performances in the alphabetical domain of knowledge. The candidate will be involved in the data collection and in the data analysis phases; moreover, he/she will be involved in the preparation of the article.

Scientific disciplinary sector: M-PSI/04 PSICOLOGIA DELLO SVILUPPO E PSICOLOGIA DELL'EDUCAZIONE

Place: Dipartimento di Scienze della Formazione (DISFOR)

Required degree:

Dottorato di ricerca in discipline psicologiche.

Subjects of the interview:

- Development of control processes.
- Methods to assess executive function in children.
- Written language learning predictors.
- Relationship between executive function and learning of written language.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 40

The assessment criteria for the qualifications and the interview will be affixed on 10.7.2018 at 11.00 in Dipartimento di Scienze Politiche (DISPO), Piazzale E. Brignole 3/A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 10.7.2018 at 14.00 in Dipartimento di Scienze Politiche (DISPO), Piazzale E. Brignole 3/A, Genova.

The interview will be held on 10.7.2018 at 14.30 in Dipartimento di Scienze Politiche (DISPO), Torre Centrale, IV Piano, Sala B, Piazzale E. Brignole 3/A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Andrea Fabrizio PIRNI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Youngsters and Institutions.

Description: The starting point of the project is the growing tension between institutions and individuals. The institutions show increasingly organizational and operational problems which compromise the socializing/integrating function to which they are devoted. The individuals acknowledge to institutions less and less trust and authority, ending to pretend from them the reception of particular claims. The aim of the project is to draw up paths of re-connection between institutions and individuals paying particular attention to activation/passivization dynamics of young people (18-24 years old) in specific contexts.

Scientific disciplinary sector: SPS/11 SOCIOLOGIA DEI FENOMENI POLITICI

Place: Dipartimento di Scienze Politiche (DISPO)

Required degree:

Dottorato di ricerca in Sociologia e sociologia politica.

Subjects of the interview:

- The theories on the transition to the adulthood.
- The empirical research on new generations in Italy and Europe.
- The scientific production of the candidate on the political involvement and the use of new media by the new generations.

The candidate will need to prove his/her knowledge of the English and Spanish languages.