

SCIENTIFIC DISCIPLINARY AREA: MATHEMATICS AND INFORMATICS

RESEARCH PROGRAM NO. 1

The assessment criteria for the qualifications and the interview will be affixed on 30.10.2018 at 9.00 in Dipartimento di Matematica (DIMA), 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 30.10.2018 at 12.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

The interview will be held on 30.10.2018 at 14.00 in Dipartimento di Matematica (DIMA), 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. Alberto SORRENTINO or via the email address: sorrentino@dim.unige.it.

Scientific coordinator: Prof. Alberto SORRENTINO

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

Title: Monte Carlo Bayesian methods for non-invasive evaluation of epilepsy.

Description: Localizing the epileptogenic area is a fundamental step in the pre-surgical evaluation of epilepsy. Doing this non-invasively, still in an experimental phase, requires the use of electroencephalographic (EEG) recordings to reconstruct brain electrical activity and locate indirectly the epileptic zone. To this aim "inverse problems" techniques are used, however, these often provide only an estimate of the electrical activity, without assessing the uncertainty of the estimate itself. In this project, the post-doc will develop and use Bayesian Monte Carlo techniques to localize the epileptogenic area from EEG data and provide uncertainty quantification. In addition, the post-doc will contribute to the development of an analysis pipeline that aims at automatically detect epileptic spikes from EEG recordings, using machine learning techniques and connectivity metrics.

Scientific disciplinary sector: MAT/08 ANALISI NUMERICA

Place: Dipartimento di Matematica (DIMA)

Required degree:

Dottorato di ricerca in Matematica, o Matematica Applicata, o Fisica, o Ingegneria Biomedica.

Subjects of the interview:

The interview will mainly assess the candidate's knowledge about the general theory of inverse problems, including regularization and Monte Carlo / Bayesian methods, and their knowledge about the inverse problem of electroencephalography.

RESEARCH PROGRAM NO. 2

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 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 26.10.2018 at 14.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on 26.10.2018 at 14.30 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

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Scientific coordinator: Prof. Barbara CATANIA

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

Title: Privacy by Design: analysis and redesign of databases according to GDPR.

Description: Privacy by Design (Article 25 of GDPR) is a design approach that takes into account the requirements related to the protection of privacy from the beginning of the design phase of data management systems and throughout the entire data life cycle. A deep re-engineering of information systems is therefore required to focus the attention on the protection of personal and sensitive data, starting from the data and service design phase. The objective of the proposed research is to analyze the problems and techniques to guarantee the Privacy by Design of new systems and existing ones. The research will be applied to a concrete case study, represented by the information system related to the teaching management of a University.

Scientific disciplinary sector: INF/01 INFORMATICA

Place: DIBRIS (Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi) – ferrai Centro Dati, Informatica e telematica di Ateneo (CeDIA)

Required degree:

Larea V.O in Informatica.

Laurea Specialistica delle classi: 23/S Informatica, o 35/S Ingegneria informatica.

Laurea Magistrale delle classi: LM-18 Informatica, o LM-32 Ingegneria informatica.

Subjects of the interview:

- Access control in database management systems.
- Analysis and design of databases.
- Tuning of databases.

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

RESEARCH PROGRAM NO. 3

The assessment criteria for the qualifications and the interview will be affixed on 5.11.2018 at 10.00 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 5.11.2018 at 13.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on 6.11.2018 at 14.00 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. Nicoletta Noceti on the phone number +39 0103536704 or via the email address: nicoletta.noceti@unige.it.

Scientific coordinator: Prof. Nicoletta NOCETI

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

Title: DIONISO – Wearable vision systems for Search&Rescue scenarios.

Description: The project focuses on the use of intelligent systems in Search&Rescue scenarios, to favor the research phase with the automatic creation of maps of the scene from data acquired with wearable devices provided to rescue personnel.

In particular, goals of the project will be the study, development, and validation of Computer Vision algorithms to: automatically detect adaptive scene landmarks from image sequences; learn temporal models of the observed scene; accurately reconstruct scene maps based on integrating SLAM techniques and the temporal models.

Scientific disciplinary sector: INF/01 INFORMATICA

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

Required degree:

Laurea Specialistica delle classi: 23/S Informatica, o 29/S Ingegneria dell'automazione, o 35/S Ingegneria informatica.

Laurea Magistrale delle classi: LM-18 Informatica, o LM-25 Ingegneria dell'automazione, o LM-32 Ingegneria informatica, o LM-66 Sicurezza informatica.

Subjects of the interview:

- Deep understanding of methods and techniques of Computer Vision for image and 3D scene representation.
- Principles of Machine Learning applied to Computer Vision.

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 **30.10.2018** 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 **30.10.2018** at **14.00** in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on **30.10.2018** 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.

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. Enrico PUPPO on the phone number +39 0103536706 or via the email address: enrico.puppo@unige.it.

Scientific coordinator: Prof. Enrico PUPPO

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

Title: Algorithms for the automatic and interactive generation of cages for the animation of digital characters.

Description: The goal of this research is to provide an automatic or interactive method to build cages for the animation of digital characters guided by its curve skeleton. The study will focus on the creation of algorithms to construct high-quality cages interactively, and then it will investigate the possibility to automatise the method, studying a way to segment the model or the skeleton automatically, producing similar results to the ones obtained by the user. The objective of the study is to improve the State of the art results thus simplifying the animation pipeline and also improving the quality of the animations.

Scientific disciplinary sector: INF/01 INFORMATICA

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

Required degree:

Laurea V.O in: Informatica, o Matematica.

Laurea Specialistica delle classi: 23/S Informatica, o 45/S Matematica.

Laurea Magistrale delle classi: LM-18 Informatica, o LM-40 Matematica.

Subjects of the interview:

State of the art in cage-based animation and cage generation. State of the art in curve skeletons and their properties.

SCIENTIFIC DISCIPLINARY AREA: PHYSICS
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RESEARCH PROGRAM NO. 5

The assessment criteria for the qualifications and the interview will be affixed on 30.10.2018 at 18.00 in Dipartimento di Fisica (DIFI), Via Dodecaneso 31, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 31.10.2018 at 18.00 in Dipartimento di Fisica (DIFI), Via Dodecaneso 31, Genova.

The interview will be held on 2.11.2018 at 10.00 in Dipartimento di Fisica (DIFI), Via Dodecaneso 31, 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. Marina PUTTI on the phone number +39 0103536383 or via the email address: putti@fisica.unige.it.

Scientific coordinator: Prof. Marina PUTTI

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

Title: Experimental investigation of the strange metal regime of unconventional superconductors.

Description: Fermi liquid theory describes the majority of metals existing in nature. However, in the 80's physicists realized that some materials could not be modeled by this theory and they behave as "strange metals". Interestingly, the strange metal regime occurs in many unconventional superconductors. Recently, a new theoretical approach has been developed in the context of quantum gravity. In particular, the dependence of transport coefficients on temperature and magnetic field, have been predicted for the strange metals. Among the possible candidate materials, BSCCO-2201 is a cuprate superconductor which exhibits all the basic prerequisites, generally considered as signatures of the Fermi liquid breakdown. The research program proposes to investigate the electrical (resistivity and Hall effect), thermal (thermal conductivity) and thermo-electrical (Seebeck and Nernst effects) transport properties of BSCCO-2201 samples.

Scientific disciplinary sector: FIS/03 FISICA DELLA MATERIA

Place: Dipartimento di Fisica (DIFI)

Required degree:

Laurea V.O in Fisica.

Laurea Specialistica delle classi: 20/S Fisica, o 61/S Scienza e Ingegneria dei materiali.

Laurea Magistrale delle classi: LM-17 Fisica, o LM-53 Scienza e Ingegneria dei Materiali.

Subjects of the interview:

Thermal and transport properties in metals: experimental techniques and phenomenological models.

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

SCIENTIFIC DISCIPLINARY AREA: CHEMISTRY
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RESEARCH PROGRAM NO. 6

The assessment criteria for the qualifications and the interview will be affixed on 29.10.2018 at 18.00 in Dipartimento di Chimica e Chimica Industriale (DCCI), Via Dodecaneso 31, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 30.10.2018 at 18.00 in Dipartimento di Chimica e Chimica Industriale (DCCI), Via Dodecaneso 31, Genova.

The interview will be held on 2.11.2018 at 13.00 in Dipartimento di Chimica e Chimica Industriale (DCCI), Via Dodecaneso 31, 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. Renata RIVA via the email address: renata.riva@unige.it.

Scientific coordinator: Prof. Renata RIVA

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

Title: Multicomponent synthesis of new STAT3 protein inhibitors.

Description: This multidisciplinary project is focused on the synthesis of new molecules as potential inhibitors of protein STAT3, a very promising and interesting molecular target for cancer therapy. For exploring the structural diversity of the new molecules, several different building blocks will be synthesized, combining them together through multicomponent reactions, especially the Ugi reaction. This will allow the employment of highly efficient step and atom economic procedures. The choice of the structures to be synthesized will be made on the basis of docking studies and the biological properties will be evaluated "in vitro" and "in vivo" as well, thanks to the collaboration with the research groups involved in the project.

Scientific disciplinary sector: CHIM/06 CHIMICA ORGANICA

Place: Dipartimento di Farmacia (DIFAR) – The research will be held at Dipartimento di Chimica e Chimica Industriale (DCCI)

Required degree:

Laurea V.O in: Chimica, o Chimica e Tecnologia Farmaceutiche, o Chimica Industriale.

Laurea Specialistica delle classi: 14/S Farmacia e farmacia industriale, o 62/S Scienze chimiche, o 81/S Scienze e tecnologie della chimica industriale.

Laurea Magistrale delle classi: LM-13 Farmacia e farmacia industriale, o LM-54 Scienze chimiche, o LM-71 Scienze e tecnologie della chimica industriale.

Subjects of the interview:

Diversity oriented synthesis, asymmetric synthesis, especially catalytic methods (biocatalysis, organocatalysis), multicomponent reactions, heterocycles synthesis.

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 31.10.2018 at 9.30 in Dipartimento di Medicina Sperimentale (DIMES), Laboratorio di Medicina Rigenerativa, Centro di Biotecnologie Avanzate (CBA), Torre C, III piano, 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 31.10.2018 at 12.30 in Dipartimento di Medicina Sperimentale (DIMES), Laboratorio di Medicina Rigenerativa, Centro di Biotecnologie Avanzate (CBA), Torre C, III piano, Largo Rosanna Benzi 10, Genova.

The interview will be held on 31.10.2018 at 14.30 in Dipartimento di Medicina Sperimentale (DIMES), Laboratorio di Medicina Rigenerativa, Centro di Biotecnologie Avanzate (CBA), Torre C, III piano, 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. Chiara GENTILI

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

Title: Nanotechnological approach for the labeling of Extracellular Vesicles (EVs) to be used in cell therapy.

Description: Stem cell research offers the possibility of developing therapies to treat important diseases affecting different types of tissues and many degenerative diseases. Although clinical and basic research has shown the great potential differentiation of these cells and how they are able by the factors, molecules and vesicles released in the damaged microenvironment, to activate the sequence of events that lead to tissue regeneration; the dynamics and distribution of stem cells during tissue regeneration remains unclear. Our research group aims to validate the distribution of MSCs and extracellular vesicles (EVs) in vivo in animal models of osteoarthritis. Using approaches of Photo-acoustic imaging we plan to use nanoparticles defined as "nanostars" to mark stem cells and EVs, which will be used in vivo for a cell therapy approach aimed at the treatment of mouse osteoarthritis, sheep and man.

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.

Subjects of the interview:

- Stem cell culture.
- Cell therapy and connective tissue engineering.
- Animal model.
- Bioreactor and biomaterial for bone and cartilage regeneration.

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 29.10.2018 at 9.00 in Dipartimento di medicina interna e specialità mediche (DIMI), Viale Benedetto XV 6, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 29.10.2018 at 12.00 in Dipartimento di medicina interna e specialità mediche (DIMI), Viale Benedetto XV 6, Genova.

The interview will be held on 29.10.2018 at 12.30 in Dipartimento di medicina interna e specialità mediche (DIMI), Viale Benedetto XV 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. Alberto BALLESTRERO on the phone number +39 0103538667 or via the email address: aballestrero@unige.it; maurizio.gallo@unige.it.

Scientific coordinator: Prof. Alberto BALLESTRERO

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

Title: Clinical evaluation and collection of data concerning the clinical features of patients with breast and colorectal cancer recruited in clinical trials and translational research programs.

Description: The development of clinical trials and translational research programs at the Internal Medicine and Oncology Clinic (Director: Prof. Alberto Ballestrero) leads to the engagement of a medical oncologist with the following requirements: a) experience in the management of clinical cancer trials according to the good clinical practice (GCP); b) clinical experience in breast and colorectal cancer; c) basic skills in the use of the most common informatic data collection and analysis suites (Office or similar); d) high knowledge of Italian and English, spoken and written, including medical terms.

Scientific disciplinary sector: MED/09 MEDICINA INTERNA

Place: Dipartimento di medicina interna e specialità mediche (DIMI)

Required degree:

Specializzazione in Oncologia Medica con adeguata produzione scientifica derivante da pubblicazioni scientifiche attinenti l'argomento di ricerca.

Subjects of the interview:

- Clinical management of breast and colorectal cancer.
- Principles of Clinical Trials and Good Clinical Practice (GCP).
- Audit and Monitoring of Clinical Studies.
- Basic IT management of clinical databases.

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

RESEARCH PROGRAM NO. 9

The assessment criteria for the qualifications and the interview will be affixed on 5.11.2018 at 9.00 in Dipartimento di medicina interna e specialità mediche (DIMI), Viale Benedetto XV 6, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 5.11.2018 at 12.00 in Dipartimento di medicina interna e specialità mediche (DIMI), Viale Benedetto XV 6, Genova.

The interview will be held on 5.11.2018 at 14.00 in Dipartimento di medicina interna e specialità mediche (DIMI), Viale Benedetto XV 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. Maurizio CUTOLO

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

Title: Evaluation of microcirculation comparing capillaroscopy, laser speckle contrast analysis and ultrasound in rheumatic disease.

Description: Microvascular damage characterizes many rheumatic diseases, in particular connective tissue diseases, such as systemic sclerosis. The assessment of the cutaneous microvascular system has significant implications regarding diagnosis, prognosis and therapy. Microvascular damage may be evaluated by various morphological methods, such as videocapillaroscopy and ultrasound, and functional techniques, as laser speckle contrast analysis and power Doppler ultrasound. The aim of this project is to search possible correlations between different methods to evaluate microvascular damage.

Scientific disciplinary sector: MED/16 REUMATOLOGIA

Place: Dipartimento di medicina interna e specialità mediche (DIMI)

Required degree:

Specializzazione in Reumatologia con adeguata produzione scientifica derivante da pubblicazioni su riviste medico scientifiche di rilevanza nazionale/internazionale con almeno cinque lavori originali come primo o ultimo nome.

Subjects of the interview:

Morphological and functional evaluation of microcirculation in connective tissue diseases.

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

RESEARCH PROGRAM NO. 10

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 at 13.00 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Library, Largo Paolo 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 26.10.2018 at 16.00 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Library, Largo Paolo Daneo 3, Genova.

The interview will be held on 26.10.2018 at 18.00 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Library, Largo Paolo 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. Matilde INGLESE

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

Title: Improving cognition in people with progressive Multiple Sclerosis.

Description: Cognitive impairment affects 70% of people with MS. The present study proposes to treat cognitive deficits using cognitive rehabilitation and aerobic exercise in combination. Treatment will be administered to 40 patients for 12 weeks. Patients will undergo brain MRI before and after treatment to investigate whether the cognitive improvement is associated with brain functional and structural changes.

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:

- Cognitive dysfunction in MA.
- Neuropsychological battery for the evaluation of patients with MS.
- Cognitive rehabilitation in MS.

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 31.10.2018 at 9.00 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Largo Paolo 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 31.10.2018 at 12.00 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Largo Paolo Daneo 3, Genova.

The interview will be held on 31.10.2018 at 13.00 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Largo Paolo 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. Gianluigi MANCARDI

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

Title: Study on the effect of choral singing activity on stroke-related aphasia.

Description: We will perform a controlled study with the goal of demonstrating, with a correct scientific approach, that the treatment with choral singing activity may have a positive therapeutic effect on non-fluent aphasia due to a previous stabilized focal cerebral vascular lesion.

We believe that this activity may cause a significant and measurable improvement of the non-fluent aphasia by comparing Italian verbal speaking and singing speaking in a single as well as in a group setting.

We plan to evaluate also the duration of the beneficial effect on the speaking ability and the effect of the choral singing activity on morphological and functional brain aspects, evaluated by 3 Tesla MRI.

Scientific disciplinary sector: MED/26 NEUROLOGIA

Place: Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI)

Required degree:

Laurea V.O. in Medicina e Chirurgia, o Lettere con adeguato curriculum comprovante il possesso di conoscenze ed esperienza scientifico-professionale relativi allo studio da svolgere come oggetto della ricerca.

Subjects of the interview:

General aspects of the choral singing activity; knowledge of basic aspects of stroke epidemiology; knowledge of the different types of speaking disturbances due to stroke; ability in using electronic databases for clinical findings recording activity.

RESEARCH PROGRAM NO. 12

The assessment criteria for the qualifications and the interview will be affixed on 31.10.2018 at 8.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), piano terra, Largo Paolo 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 31.10.2018 at 11.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), piano terra, Largo Paolo Daneo 3, Genova.

The interview will be held on 31.10.2018 at 12.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), piano terra, Largo Paolo 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: Validation of MUNIX and Echography as an effective non-invasive biomarker for assessing disease progression for some neuromuscular disease.

Description: A biomarker is defined as a characteristic that is objectively measured and evaluated as an indicator of pathogenic processes. Motor unit number index (MUNIX) is a technique to obtain a parameter related to number of motor unit. It has been demonstrated to be a valid electrophysiological biomarker in motor neuron disease and hereditary or inflammatory neuropathies. Muscle ultrasound can be used in almost all Neuromuscular diseases. One of the easiest and quickest uses of ultrasound is assessing muscle size and echogenicity. Quantification of muscle echo intensity is more objective and less observer dependent, and therefore it is expected to increase the reliability and sensitivity of muscle ultrasound. It has been demonstrated to be a good biomarker in most neuromuscular diseases. A correlation between MUNIX, muscle ultrasound and strength in a follow-up study will confirm the value of this biomarkers in detecting alterations in neuropathy and motor-neuron disease severity over time.

Scientific disciplinary sector: MED/26 NEUROLOGIA

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:

Hereditary Neuropathies, Acquired Neuropathies, Electrophysiology of the Peripheral Nervous system, Imaging of the Peripheral Nervous system.

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

RESEARCH PROGRAM NO. 13

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 at 9.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), piano terra, bacheca, Largo Paolo 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 26.10.2018 at 12.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), piano terra, bacheca, Largo Paolo Daneo 3, Genova.

The interview will be held on 26.10.2018 at 15.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), piano terra, Largo Paolo 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. Antonio UCCELLI

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

Title: Dissection of the role of HCAR2 in the therapeutic features and potential side effects exerted by dimethyl fumarate in multiple sclerosis.

Description: Based on the role of HCAR2 in the therapeutic effect of DMF in EAE, together with our data supporting an anti-inflammatory effect of DMF on microglia through the novel HCAR2-mediated AMPK/Sirt1 axis, we postulated that DMF may exert its neuroprotective action through its effect on myeloid cells through the activation this new pathway. In particular we'll focus on its effect on spleen-DC. Besides, since DMF is often associated with gastro-intestinal side effects we postulated that this could be related to a pro-inflammatory effect of MMF through HCAR2-dependent production of prostaglandins in intestinal epithelial cells. Thus, since HCAR2-pathways are cell- and ligand-biased, we'll evaluate the possibility to exploit ligand competition for HCAR2 to relieve this gastro-intestinal side effects.

Scientific disciplinary sector: MED/26 NEUROLOGIA

Place: Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI)

Required degree:

Laurea Specialistica della classe 6/S Biologia.

Subjects of the interview:

- Neuroinflammation and neurodegeneration.
- Pathogenetic mechanisms in multiple sclerosis and in the experimental model.
- Immunomodulatory therapy in multiple sclerosis.

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 5.11.2018 at 17.30 in Centro di eccellenza per lo studio dei meccanismi molecolari di comunicazione tra cellule: dalla ricerca di base alla clinica (CEBR), Viale Benedetto XV 9, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 6.11.2018 at 9.30 in Centro di eccellenza per lo studio dei meccanismi molecolari di comunicazione tra cellule: dalla ricerca di base alla clinica (CEBR), Viale Benedetto XV 9, Genova.

The interview will be held on 6.11.2018 at 11.30 in Dipartimento di Neuroscienze, Riabilitazione, Oftalmologia, Genetica e Scienze Materno-Infantili (DINOEMI), Studio Prof. Uccelli, Largo Paolo 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. Antonio UCCELLI

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

Title: Development of Mouse Model of Multiple sclerosis.

Description: Multiple sclerosis is an autoimmune disease of the central nervous system, characterized by chronic inflammation and demyelination, leading to an impairment of synaptic transmission and network connectivity with both neuronal and axonal loss. Chronic inflammatory processes that continuously disturb neuro-axonal homeostasis drive neurodegeneration, so the clinical outcome is likely to depend on the balance between inflammation and the remaining capacity to neuronal self-protection and repair. A better understanding of molecular and pathogenic mechanisms involved in myelin loss and in cell infiltration to periphery into the central nervous system, will allow to test, in the animal model, new therapeutic approaches to be translated in the clinical field of multiple sclerosis.

Scientific disciplinary sector: MED/26 NEUROLOGIA

Place: Centro di eccellenza per lo studio dei meccanismi molecolari di comunicazione tra cellule: dalla ricerca di base alla clinica (CEBR)

Required degree:

Laurea Specialistica della classe 9/S Biotecnologie mediche, veterinarie e farmaceutiche.

Subjects of the interview:

- Neuroinflammation, neurodegeneration.
- Pathogenetic mechanism of multiple sclerosis and in the animal model.

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 29.10.2018 at 8.00 in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Padiglione 4, 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 29.10.2018 at 11.00 in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Padiglione 4, Largo Rosanna Benzi, 10, Genova.

The interview will be held on 29.10.2018 at 12.30 in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Padiglione 4, 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. Paolo PERA

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

Title: Implant prosthodontic rehabilitation using zygomatic implants.

Description: The aim of this study will be to evaluate the clinical outcomes of immediate full-arch rehabilitations using mono- or bi-lateral zygomatic implants and carbon fiber frameworks.

Patients with severely atrophic maxillae and requiring mono- or bi-lateral zygomatic implants to support a fixed full-arch rehabilitation will be included.

Fixed screw-retained prostheses will be delivered within 48 hours and will be endowed with a carbon fiber reinforced composite framework.

During the follow-up patients' satisfaction and peri-implant health parameters will be evaluated. Technical and biological complications will be recorded.

Scientific disciplinary sector: MED/28 MALATTIE ODONTOSTOMATOLOGICHE

Place: Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC)

Required degree:

Laurea V.O in Odontoiatria e protesi dentaria.

Laurea Specialistica della classe 52/S Odontoiatria e protesi dentaria.

Laurea Magistrale delle classi LM-46 Odontoiatria e protesi dentaria.

Subjects of the interview:

- Physiopathology of the stomatognathic system.
- Implant prosthodontic rehabilitation of partial and completely edentulous patients.

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 31.10.2018 at 8.00 in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Padiglione 4, 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 31.10.2018 at 11.00 in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Padiglione 4, Largo Rosanna Benzi, 10, Genova.

The interview will be held on 31.10.2018 at 12.30 in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Padiglione 4, 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. Paolo PERA

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

Titolo One stage vs. two stage technique for extrashort implants: split-mouth study.

Description: The aim of this split-mouth study will be to evaluate the clinical outcomes of extrashort dental implants placed using a one-stage or a two-stage technique in the upper or the lower jaw.

Each patient will receive two identical extrashort implants with a 5,5 or 6,5 mm length in adjacent sites.

In each site one of the two implants (randomly selected) will be inserted with a single stage technique, the other with a two-stage technique.

During the follow-up, ISQ values and peri-implant health parameters will be evaluated. Technical and biological complications will be recorded.

Scientific disciplinary sector: MED/28 MALATTIE ODONTOSTOMATOLOGICHE

Place: Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC)

Required degree:

Laurea V.O in Odontoiatria e protesi dentaria.

Laurea Specialistica della classe 52/S Odontoiatria e protesi dentaria.

Laurea Magistrale delle classi LM-46 Odontoiatria e protesi dentaria.

Subjects of the interview:

- Physiopathology of the stomatognathic system.
- Implant prosthodontic rehabilitation of partial and completely edentulous patients.

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 **26.10.2018** at **9.00** in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), 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 **26.10.2018** at **12.00** in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Largo R. Benzi 10, Genova.

The interview will be held on **26.10.2018** at **13.00** in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOEMI), Clinica Psichiatrica, 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. Laura MORI

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

Title: The effect of combined anodal tDCS and exergames in the treatment of cognitive disorders in patients affected by Multiple Sclerosis: a double-blind, randomized, controlled study.

Description: The present randomized, double-blind, controlled study aims to investigate the effects of A-tDCS in the treatment of cognitive disorders in a large population of MS patients. The recruited subjects will undergo cognitive treatment by means of exergames and A-tDCS. The exergames exploit a virtual reality model that, through a wireless controller, allows the subject to interact with an avatar in response to changes in speed, direction and acceleration to stimulate cognitive abilities. Since the positive effects presented in recent papers, we expect to confirm the importance of A-tDCS in the treatment of cognitive disorders and to evaluate the possible improvements obtained in everyday life through the combined treatment.

Scientific disciplinary sector: MED/34 MEDICINA FISICA E RIABILITATIVA

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

Required degree:

Laurea V.O in Ingegneria Biomedica.

Laurea Specialistica della classe 26/S Ingegneria Biomedica.

Laurea Magistrale della classe LM-21 Ingegneria Biomedica.

Subjects of the interview:

- Evidence based medicine, virtual reality and wireless controllers, guidelines and rehabilitative approaches in exergames.
- Analysis and data processing.
- Principles and techniques of non-invasive cortical neuromodulation.

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 30.10.2018 at 9.00 in Dipartimento di scienze della salute (DISSAL), Via Antonio Pastore 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 30.10.2018 at 12.00 in Dipartimento di scienze della salute (DISSAL), Via Antonio Pastore 1, Genova.

The interview will be held on 30.10.2018 at 14.00 in Dipartimento di scienze della salute (DISSAL), Via Antonio Pastore 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. Andrea ORSI

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

Title: Evaluation of common clinical-epidemiological characteristics and socio-epidemiological burden of influenza and other acute respiratory infections, in the light of new integrated vaccination strategies.

Description: Acute Respiratory Infections (ARI) are a serious problem for human health. Some of the microorganisms related to ARI, such as Influenza virus, Respiratory Syncytial Virus, Streptococcus pneumoniae, are recognized by the World Health Organization (WHO) as pathogens with a high risk for their epidemic and pandemic potential. In line with the WHO recommendations, the design and implementation of adequate integrated surveillance systems are considered a priority in terms of research for public health. The present project includes the evaluation of the clinical, epidemiological and social impact of the various microorganisms responsible for ARI in the different age groups and of new integrated vaccination strategies for the prevention of ARI.

Scientific disciplinary sector: MED/42 IGIENE GENERALE E APPLICATA

Place: Dipartimento di scienze della salute (DISSAL)

Required degree:

Dottorato di ricerca in Epidemiologia e Prevenzione, indirizzo Prevenzione Vaccinale.

Subjects of the interview:

- Epidemiological impact of influenza and Acute Respiratory Infections (ARI).
- Methodologies for assessing the clinical, epidemiological and social impact of ARI.
- Effectiveness of influenza vaccination in the subject over-65.
- Benefits offered by the introduction of conjugated pneumococcal vaccine in adults.
- Risk factors associated with the development of lower respiratory tract infections with particular reference to community-acquired pneumonia.
- Vaccines against the Respiratory Syncytial Virus.

RESEARCH PROGRAM NO. 19

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 at 8.30 in Dipartimento di scienze della salute (DISSAL), Via De Toni 12, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.10.2018 at 12.00 in Dipartimento di scienze della salute (DISSAL), Via De Toni 12, Genova.

The interview will be held on 5.11.2018 at 9.00 in Dipartimento di scienze della salute (DISSAL), Via De Toni 12, 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. Alfredo VERDE

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

Title: Narratives of delinquency: between narratology, semiotics and clinical criminology.

Description: In recent years, narrative sciences have found an application in criminology: the research project is at the crossroads between the analysis of the autobiographical texts of offenders and clinical criminology, through the analysis of the “narratives that precede the crime” of their relationship with the subsequent narratives to the same, and finally of the particular contexts and the particular necessities that the offender has to modify what is narrated to evident defensive purposes, also in a procedural sense. The methods utilized will transcend the mere narratological analysis, to move towards the psychodynamic reading typical of "psychosocial criminology", open to the unconscious mechanisms the relation between narrator and narratee in the co-costruction of the meaning.

Scientific disciplinary sector: MED/43 MEDICINA LEGALE

Place: Dipartimento di scienze della salute (DISSAL)

Required degree:

Laurea V.O in: Filosofia, o Psicologia.

Laurea Specialistica delle classi: 17/S Filosofia e storia della scienza, o 18/S Filosofia teoretica, morale, politica ed estetica, o 58/S Psicologia, o 96/S Storia della filosofia.

Laurea Magistrale delle classi: LM-51 Psicologia, o LM-78 Scienze filosofiche.

Subjects of the interview:

- Recent developments in narrative psychology.
- The relations between philosophy and psychodynamic approaches.
- Structuralism, semiotics and narratology.
- Criminology and narrative science.

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

RESEARCH PROGRAM NO. 20

The assessment criteria for the qualifications and the interview will be affixed on 30.10.2018 at 8.45 in Campus di Savona, Palazzina Marchi, Via A. 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 30.10.2018 at 13.00 in Campus di Savona, Palazzina Marchi, Via A. Magliotto 2, Savona.

The interview will be held on 30.10.2018 at 14.00 in Campus di Savona, Palazzina Marchi, Via A. 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@cimafoundationNO.org.

Scientific coordinator: Prof. Luca FERRARIS

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

Title: Development of advanced tools for hydrological nowcasting.

Description: The research project is part of the theme of the operational flood forecasting. The goal of the research is to improve the hydro-meteorological chain FloodPROOFs, containing the Continuum hydrological model, operating at national level, by introducing tools able to provide a forecast of streamflow in the immediate future (nowcasting). The Continuum hydrological model will be coupled with the PhaSt model capable of statistically evolve in the future the precipitation field observed by meteorological radar. The ability of the PhaSt model to represent the dynamic evolution of precipitation will be improved and the ability of the system to correctly predict the observed streamflow will be investigated. The object of the research work is also the improvement of the hydrological Continuum model to reduce the hydrological uncertainty in the forecast of floods.

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

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS) - the research will be held at Centro Internazionale in Monitoraggio Ambientale Fondazione (CIMA)

Required degree:

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

Subjects of the interview:

Hydrology, hydro-meteorology, nowcasting, distributed hydrological modelling, flood forecasting.

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 6.11.2018 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 6.11.2018 at 12.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on 6.11.2018 at 12.15 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. Bianca FEDERICI on the phone number +39 010-3532421 or via the email address: bianca.federici@unige.it.

Scientific coordinator: Prof. Bianca FEDERICI

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

Title: Generation and management of 3D models of the Roia basin on webGIS platform.

Description: The candidate is required to identify optimal 3D visualisation procedures on webGIS platforms of river basin morphology and data distributed above or below them (e.g., climate or groundwater data). He could experiment the javascript libraries currently used by major webGIS, integrating them with the latest WebGL graphics libraries for managing and generating 3D models via web. All software will have to be cross platform and server-oriented, distributed under open-source license. The procedure will have to be applied for the visualization of the cross-border Roia basin. The activity will take place within the framework of the research project INTERREG V-A France - Italy ALCOTRA 2014-2020 CONCERT-EAUX.

Scientific disciplinary sector: ICAR/06 TOPOGRAFIA E CARTOGRAFIA

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

Required degree:

Laurea Specialistica delle classi: 3/S Architettura del paesaggio, o 4/S Architettura e ingegneria edile, o 28/S Ingegneria civile, o 38/S Ingegneria per l'ambiente e il territorio.

Laurea Magistrale delle classi: LM-3 Architettura del Paesaggio, o LM-4 Architettura e ingegneria edile-architettura, o LM-18 Informatica, o LM-23 Ingegneria civile, o LM-24 Ingegneria dei sistemi edilizi, o LM-26 Ingegneria della sicurezza, o LM-35 Ingegneria per l'ambiente e il territorio.

Subjects of the interview:

- Numerical cartography and GIS, with particular attention to the management and integration of distributed data.
- GIS platforms and services on the web.

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

RESEARCH PROGRAM NO. 22

The assessment criteria for the qualifications and the interview will be affixed on 30.10.2018 at 10.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15/A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 30.10.2018 at 13.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15/A, Genova.

The interview will be held on 30.10.2018 at 14.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15/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. Francesca PIRLONE

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

Title: Definition of a joint plan for the sustainable management of waste (in port areas) - PORT-5R Project.

Description: The research is aimed at the definition of a joint plan for the prevention, reduction and treatment of waste in the port areas of the partners of the project PORT-5R. This plan refers to the 5R strategy - Reduce, Recycle, Reuse, Rot, Refuse - and it is a preparatory work for the adoption of a common protocol between the partners. Within the Plan, possible joint governance actions are identified to reduce the impact of human activities related to the exploitation of the sea and to improve the quality of marine waters in ports.

Scientific disciplinary sector: ICAR/20 TECNICA E PIANIFICAZIONE URBANISTICA

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

Required degree:

Laurea Specialistica della classe 4/S Architettura e Ingegneria edile.

Subjects of the interview:

Community programming, sustainable waste management land planning, land management.

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

RESEARCH PROGRAM NO. 23

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 at 8.45 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Scuola Politecnica, 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 26.10.2018 at 11.45 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Scuola Politecnica, Via Montallegro 1, Genova.

The interview will be held on 26.10.2018 at 12.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Scuola Politecnica, 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. Paola GUALENI

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

Title: Second Generation Intact Stability criteria.

Description: The activity is focused on the second generation intact stability criteria, that are about to be finalized at the International Maritime Organization (IMO). They have been developed to assess the ship roll behavior in a seaway (under the effects of wave and wind). They are organized in a multi-layer approach and make reference to stability failure modes (e.g. parametric roll, surf-riding). The adopted formulations require the development of computational tools, already implemented at DITEN.

The main aims of the activity are: to complete the validation of such computational tools by means of comparisons with other seakeeping numerical tools and experimental data; to point out possible design issues deriving from the application of these new criteria, with the possible relevant solutions.

Scientific disciplinary sector: ING-IND/01 ARCHITETTURA NAVALE

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

Required degree:

Laurea V.O. in Ingegneria Navale.

Laurea Specialistica della classe 37/S Ingegneria navale.

Laurea Magistrale della classe LM-34 Ingegneria navale.

Subjects of the interview:

- Seakeeping.
- Ship Stability.
- IMO Safety Criteria.

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

RESEARCH PROGRAM NO. 24

The assessment criteria for the qualifications and the interview will be affixed on **5.11.2018** at **11.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Scuola Politecnica, 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 **6.11.2018** at **11.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Scuola Politecnica, Via Montallegro 1, Genova.

The interview will be held on **6.11.2018** at **14.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Scuola Politecnica, 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. Cesare Mario RIZZO on the phone number +39 0103532272 or via the email address: cesare.rizzo@unige.it.

Scientific coordinator: Prof. Cesare Mario RIZZO

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

Title: The design of innovative submarines: methodological and specialist issues with particular attention to marine vehicle structures and on board systems.

Description: The aim of the activity is to further strengthen and deepen the fundamental knowledge about innovative submarines design that can be developed from a general perspective on the design process and from specific perspective on specialist subject, but in any case in strong relation with the mission and the operational profile of the unit. The activity will focus on the selection of the submarine energy production system and propulsion plant, by comparison of different design solutions based also on energy efficiency performance. Furthermore advanced criteria for the submarine structural lay –out selection and relevant scantlings will be identified.

An innovative methodology will be developed for decision support when dealing with survivability issues.

Scientific disciplinary sector: ING-IND/02 COSTRUZIONI E IMPIANTI NAVALI E MARINI

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

Required degree:

Laurea V.O. in Ingegneria Navale.

Laurea Specialistica della classe 37/S Ingegneria navale.

Laurea Magistrale della classe LM-34 Ingegneria navale.

Subjects of the interview:

Ship design, ship structures and on board systems with specific reference to submarines.

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

RESEARCH PROGRAM NO. 25

Scientific coordinator: Prof. Andrea CATTANEI

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

Title: Experimental study of the aerodynamic flutter in low-speed fans for automotive cooling units.

Description: The research regards the subharmonic vibration of low-speed axial fans with shrouded blades and is aimed at characterizing the phenomenon and detecting the parameters which allows to minimize it. The vibration is due to the interaction of the leakage flow with the rotor blades, which results in a periodic thrust, and on the effect on the flow of the periodic variation of the gap size due to the deformation.

The activity consists in three parts:

- Design e realization of a test rig which allows to reproduce the phenomenon and to take both anemometric and vibrometric measurements.
- Study of the effect of aerodynamic characteristics (shape of the shroud, obstacles, obstructions, blade stacking).
- Study of the effect of mechanical characteristics (equivalent elasticity and damping factor).

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

Place: Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti (DIME)

Required degree:

Dottorato di ricerca in Ingegneria delle macchine a fluido or equivalent qualifications.

Subjects of the interview:

Fluid dynamics of shrouded low-speed fans and related aeroelastic phenomena, anemometric and vibrometric measurement techniques, suitable data processing methods.

RESEARCH PROGRAM NO. 26

The assessment criteria for the qualifications and the interview will be affixed on **29.10.2018** at **9.30** in Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture (CIELI), Via F. Vivaldi 5 - Darsena (secondo piano), Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **29.10.2018** at **13.00** in Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture (CIELI), Via F. Vivaldi 5 - Darsena (secondo piano), Genova.

The interview will be held on **29.10.2018** at **15.00** in Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture (CIELI), Via F. Vivaldi 5 - Darsena (secondo piano), 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. Giovanni SATTA

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

Title: Energy requirements analysis and design of infrastructures for LNG bunkering for Italian and French harbours in the framework of the European Project INTERREG Maritime ITA-FRA (TDI RETE-GNL).

Description: The research activity is part of the INTERREG Project “Tecnologie e Dimensionamento di Impianti per la RETE di distribuzione primaria di GNL nei porti dell’area transfrontaliera”. The objective is the study and the design of the infrastructures and components for the bunkering of liquefied natural gas (LNG), with reference to the ports of the Target Area, considering the demand that insists on them and the synergies with the general management of the port energy flows. The energy requirements in the port area will be evaluated, considering the employment of cogenerative or trigenerative plants fueled with LNG, and considering the economic and environmental profiles. The plant characteristics and the plant components will be determined to meet the energy requirements from both electrical and thermal energy production point of view, with emphasis on the design and sizing of the plant components (dynamic components, combustion chamber, heat exchangers, storage and feeding systems).

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

Place: Centro Italiano di Eccellenza sulla Logistica i Trasporti e le Infrastrutture (CIELI)

Required degree:

Laurea Specialistica della classe 36/S Ingegneria meccanica.

Subjects of the interview:

- Technologies for the bunkering of liquefied natural gas (LNG) in the port area.
- Design criteria of LNG bunkering systems and components (dynamic components, combustion chamber, heat exchangers, storage and feeding systems).
- Study of port energy needs considering jointly technical-engineering, economic-financial and environmental sustainability profiles.
- Examination of energy requirements for energy production in the port area through cogenerative or trigenerative plants fueled with LNG.

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 **7.11.2018** at **9.00** in Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti (DIME) - Sezione MASET, 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 **7.11.2018** at **12.00** in Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti (DIME) - Sezione MASET, Via Montallegro 1, Genova.

The interview will be held on **7.11.2018** at **12.30** in Dipartimento di Ingegneria meccanica, energetica, gestionale e dei trasporti (DIME) - Sezione MASET, 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. Daniele SIMONI

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

Title: Analysis on transitional flat plate boundary layers and correlation development.

Description: The activity will be focused on the acquisition of the velocity fields characterizing flat plate boundary layers developing with different adverse pressure gradient, flow Reynolds number and free-stream turbulence intensity levels. Data will be adopted to produce an exhaustive data base describing the effects of the flow parameter variation on transitional related quantities, thus to generate correlations useful for the prediction of the boundary layer transition process and to assist closure scheme to be implemented in CFD solvers.

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

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:

- Analysis and acquisition of the flow field in transitional flows by means of LDV and PIV.
- Modal decomposition techniques.
- Wavelet analysis and intermittency function.
- Turbulence spot production rate and related transitional parameter.

RESEARCH PROGRAM NO. 28

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 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 26.10.2018 at 12.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15A, Genova.

The interview will be held on 26.10.2018 at 12.30 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.

Scientific coordinator: Prof. Elisabetta ARATO

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

Title: Solid adsorption of gaseous pollutants.

Description: The research will be focused on the process of adsorption of CO₂ within the topic of its capture and segregation in order to reduce the emissions of greenhouse gases.

In the framework of the present activity, both different adsorbents and currents containing different concentrations of CO₂ will be analysed. In particular, the performances, as adsorbent, of biochar produced by gasification processes will be evaluated and the application of the adsorption process to flows with a high CO₂ content coming from fuel cells will be studied. The latter, in fact, can be used also as CO₂ concentrators in addition to the clean electricity production.

Furthermore, the research will be dedicated to the possibility of using the adsorption technique to other types of gaseous pollutants such as, for example, H₂S.

The study approach will consist in the parallel process of experimental activities and modeling activities in a mutual relationship guidance and verification.

For the purposes of the selection, the experience of one or more years in research and post-doc activity will be positively evaluated, particularly in the field of process simulation through experimental and numerical investigations.

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

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

Required degree:

Dottorato di ricerca in Fluidodinamica e Processi dell'Ingegneria Ambientale.

Subjects of the interview:

Process analysis and simulation, chemical thermodynamics and kinetics, chemical reactor theory.

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

RESEARCH PROGRAM NO. 29

The assessment criteria for the qualifications and the interview will be affixed on **26.10.2018** at **9.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), 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 **26.10.2018** at **12.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Opera Pia 15, Genova.

The interview will be held on **26.10.2018** at **12.30** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), 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. Patrizia PEREGO

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

Title: Enhanced food packaging with antioxidant properties.

Description: The research project aims to the realization of innovative materials for food packaging purposes, which will be obtained by adding antioxidant-rich and stabilized extracts into polymers, suitable for food contact.

The objectives of the project are: the production of the antioxidant-rich extract by extraction from vegetable sources; the extract stabilization by means of encapsulation techniques; fabrication by electrospinning of the functionalized polymer and its characterization. The functionalized material will be subjected to mechanical analysis and migration test in food simulants; the antioxidant properties will be evaluated both in the extract and in the functionalized material and, in addition, antimicrobial properties will be tested.

Scientific disciplinary sector: ING-IND/25 IMPIANTI CHIMICI

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

Required degree:

Laurea Magistrale della classe LM-22 Ingegneria Chimica.

Subjects of the interview:

Evaluation techniques for food contact materials, strategies for engineering polymeric materials with bioactive molecules, extraction techniques for thermo-sensitive compounds, analytical techniques for the determination of physico chemical and mechanical properties of polymers, modeling of release kinetic of entrapped molecules and of their degradation rate.

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 5.11.2018 at 8.30 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Laboratorio DSP, Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 5.11.2018 at 15.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Laboratorio DSP, Via Opera Pia 13, Genova.

The interview will be held on 5.11.2018 at 16.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Laboratorio DSP, Via Opera Pia 13, 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. Fabio LAVAGETTO

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

Title: Multimedia signal processing for context awareness in IoT environments and Smart Spaces.

Description: The activity will tackle the study, analysis and development of context awareness solutions in different applications related to smart mobile environments, such as smart spaces and smart cities. In detail, the work will focus on specific aspects of smart scenarios, such as the design of speaker recognition algorithms, multiple observations, and unauthorized drone detection. The research will be carried out by using machine learning and data analysis techniques applied to different multimedia signals, such as audio samples and WiFi traffic flows.

Scientific disciplinary sector: ING-INF/03 TELECOMUNICAZIONI

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

Required degree:

Laurea Magistrale della classe LM-27 Ingegneria delle Telecomunicazioni.

Subjects of the interview:

- Signal Processing.
- Machine Learning.
- Context Awareness.
- Internet of Things.

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 26.10.2018 at 10.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Laboratorio Satellite Networking Laboratory, Padiglione E, III piano, Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.10.2018 at 15.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Laboratorio Satellite Networking Laboratory, Padiglione E, III piano, Via Opera Pia 13, Genova.

The interview will be held on 26.10.2018 at 16.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Laboratorio Satellite Networking Laboratory, Padiglione E, III piano, Via Opera Pia 13, 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. Mario MARCHESE

NO. 1 research fellowship - Duration 2 years – Annual pre-tax amount: € 19.367,00

Title: Security treats in telecommunications networks applied to smart cities/smart industries.

Description: The activity concerns the analysis of the issues and the study of the security threats inside a 5G network for distributed and critical systems, which are common in Smart Cities and Smart Industries. Topical will be the investigation of technologies peculiar of these environments and the description of the necessary communication requirements. An analysis of the Quality of Service requirements typical of a challenging environment such as a Smart City, and at the same time a study of the Cybersecurity problems that can arise in the considered scenario are needed. Moreover, possible solutions of the discovered problems need to be investigated.

Scientific disciplinary sector: ING-INF/03 TELECOMUNICAZIONI

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

Required degree:

Laurea Magistrale della classe LM-27 Ingegneria delle Telecomunicazioni.

Subjects of the interview:

- Quality of service techniques for telecommunication networks.
- Communication protocols of Smart Cities and Smart Industries.
- Programming languages (Python, C++, etc).

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

RESEARCH PROGRAM NO. 32

The assessment criteria for the qualifications and the interview will be affixed on **26.10.2018** at **8.00** in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **26.10.2018** at **14.30** in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The interview will be held on **26.10.2018** at **17.00** in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, 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. Fulvio MASTROGIOVANNI

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

Title: Knowledge representation and reasoning methods for human-robot cooperation in factory scenarios.

Description: The main goal of the foreseen research activities is the design and development of novel human-robot interaction techniques in factory scenarios. In particular, the objective is two-fold: (i) the design of a knowledge representation system for human-robot cooperation based on the Fuzzy ontology paradigm; (ii) the implementation of related algorithms allowing a robot and a human operator to cooperate in order to meet certain objectives, e.g., the assembly of a given subassembly. The work to be carried out shall include:

1. The analysis of knowledge representation techniques based on the Fuzzy ontologies paradigm.
2. The integration of such techniques with models for human-robot cooperation in factory scenarios.
3. The implementation of in-the-loop action/task planning techniques.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:

Laurea Magistrale delle classi: LM-25 Ingegneria dell'automazione, o LM-32 Ingegneria informatica

Subjects of the interview:

Knowledge representation methods, ontologies, Fuzzy ontologies, automatic reasoning, software architectures for robotics.

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

RESEARCH PROGRAM NO. 33

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 at 13.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Viale F. Causa 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.10.2018 at 16.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Viale F. Causa 13, Genova.

The interview will be held on 5.11.2018 at 16.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Viale F. Causa 13, 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. Alessio MERLO on the phone number +39 010 353 2344 or via the email address: alessio@dibris.unige.it.

Scientific coordinator: Prof. Alessio MERLO

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

Title: Methodologies for the security analysis of IoT devices based on Android Things.

Description: The explosion of the Internet of Things brings new challenges in the field of cybersecurity. Such challenges can hardly be solved through approaches already adopted in other paradigms (mobile, pervasive, grid, cloud, etc.) as the IoT operating systems have very specific requirements and functions. In this sense, in order to define new security methods for the IoT, it is necessary to understand the characteristics of IoT operating systems and their security requirements.

To this aim, the purpose of this research project is the definition of a methodology for the study and analysis of Android Things, the emerging OS standard for IoT proposed by Google. The methodology should allow precisely evaluating Android Things in terms of the functionality and the security guarantees it offers.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:

Dottorato di ricerca in Ingegneria Elettronica, Informatica, della Robotica e delle Telecomunicazioni

Subjects of the interview:

- Computer Security.
- Operating Systems.

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 26.10.2018 at 10.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 26.10.2018 at 14.30 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The interview will be held on 26.10.2018 at 15.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, 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. Gabriele ARNULFO

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

Title: Studying structural and functional connectivity in paediatric patients affected by focal epilepsy.

Description: The onsets of epilepsy in 80% of the cases is at paediatric age; on average, 25% of the patients are refractory to Anti-Epileptic Drugs. To treat these last cases, surgical ablation of the onset zone can be considered. The localization of this zone is usually performed with highly invasive intra-cerebral recordings. To prevent this, modern inversion techniques and non-invasive EEG recordings can be used. These techniques may require structural information, such as cortical segmentation and the characterization of white matter pathways. The successful candidate will study functional and structural connectivity to help formalize forward/inverse solutions in HDEEG from focal epileptic patients. Implementation will be done with Python or Matlab, the most commonly used tools in neuroscience.

Scientific disciplinary sector: ING-INF/06 BIOINGEGNERIA ELETTRONICA E INFORMATICA

Place: Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:

Laurea V.O in: Ingegneria biomedica, o Informatica, o Scienze dell'informazione, o Ingegneria elettronica, o Ingegneria Informatica, o Ingegneria delle telecomunicazioni, o Fisica.

Laurea specialistica delle classi: 20/S Fisica, o 23/S Informatica, o 26/S Ingegneria biomedica, o 30/S Ingegneria delle telecomunicazioni, o 32/S Ingegneria elettronica, o 35/S Ingegneria informatica.

Laurea Magistrale delle classi: LM-17 Fisica, o LM-18 Informatica, o LM-21 Ingegneria biomedica, o LM-27 Ingegneria delle telecomunicazioni, o LM-26 Ingegneria della sicurezza, o LM-29 Ingegneria elettronica, o LM-32 Ingegneria informatica.

Subjects of the interview:

Segmentation and coregistration algorithms, Diffusion tensor imaging, structural and functional connectivity, graph theory.

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

SCIENTIFIC DISCIPLINARY AREA: ANTIQUITIES, PHILOLOGY, LITERARY STUDIES, ART HISTORY
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RESEARCH PROGRAM NO. 35

The assessment criteria for the qualifications and the interview will be affixed on 29.10.2018 at 11.00 in Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), IV piano, Via Balbi 2, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 29.10.2018 at 15.00 in Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), IV piano, Via Balbi 2, Genova.

The interview will be held on 29.10.2018 at 16.00 in Dipartimento di Italianistica, Romanistica, Antichistica, Arti e Spettacolo (DIRAAS), IV piano, Via Balbi 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. Marco BERISSO

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

Title: The dramatic works of Remigio Zena among the unpublished manuscripts in his archive.

Description: The project aims to give an interpretative and philological framework for Zena dramatic works referring to the unpublished manuscript materials in the Library of the Società Ligure di Storia Patria in Genoa. The four objective are:

- a) A detailed inventory of the manuscripts concerning his dramatic production.
- b) A literary and historical analysis of his dramatic production, related to the contemporary experiences in XIX century's second half. It will be also necessary to retrieve the traces, if present, of the scenical reception of his works in the same years.
- c) A philological study of some representative texts to clarify the strategies he followed to create his plays.
- d) A first selection of the plays that can afford nowadays a critical edition and a description of the problems that the future editor of his dramas will deal with.

Scientific disciplinary sector: L-FIL-LET/13 FILOLOGIA DELLA LETTERATURA ITALIANA

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 Letterature e culture classiche e moderne.

Subjects of the interview:

- 1) The literary works of Remigio Zena.
- 2) Methodology of authorial philology.
- 3) Discussion of the presented publications.

RESEARCH PROGRAM NO. 36

The assessment criteria for the qualifications and the interview will be affixed on 26.10.2018 at 11.00 in Dipartimento di Lingue e culture moderne (DLCM), Piazza Santa 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 26.10.2018 at 16.00 in Dipartimento di Lingue e culture moderne (DLCM), Piazza Santa Sabina 2, Genova.

The interview will be held on 30.10.2018 at 9.00 in Dipartimento di Lingue e culture moderne (DLCM), Piazza Santa 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.

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. Micaela ROSSI on the phone number +39 345 0868907 or via the email address: micaela.rossi@unige.it.

Scientific coordinator: Prof. Micaela ROSSI

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

Title: Towards a model for monitoring neologisms in specialised languages: Anglicisms and Italian language in terminologies, linguistic policies and discourse dynamics.

Description: The project will be part of the activities of the Certem (Centro di Ricerca in Terminologia Multilingue) of the University of Genoa. The main aim is to carry out a monitoring system on neologisms in the Italian specialised discourses, on the model of projects already present in the Romance area (among others, Néoveille and Logoscope for the French language, Obneo for the Spanish and Catalan languages). Based on the analysis of extensive textual corpora, the project aims to enucleate the morphological and discursive trends that complement the emergence of new lexical and terminological units. In particular, the project intends to deepen the role and behaviour of Anglicisms in Italian LSP, in comparison with other European languages (French, Spanish, German) and other situations in European linguistic policies.

Scientific disciplinary sector: L-LIN/04 LINGUA E TRADUZIONE - LINGUA FRANCESE

Place: Dipartimento di Lingue e culture moderne (DLCM)

Required degree:

Laurea Magistrale delle classi: LM-37 Lingue e letterature moderne europee e americane, o LM-38 Lingue moderne per la comunicazione e la cooperazione, o LM-94 Traduzione specialistica e interpretariato.

Subjects of the interview:

Current trends in terminology research, linguistic theories on neology, linguistic policies in terminology.

SCIENTIFIC DISCIPLINARY AREA: HISTORY, PHILOSOPHY, PEDAGOGY AND PSYCHOLOGY

RESEARCH PROGRAM NO. 37

The assessment criteria for the qualifications and the interview will be affixed on 29.10.2018 at 9.30 in Dipartimento di Scienze della Formazione (DISFOR), Laboratory of Language and Social Cognition, Stanza 3c3, C.so 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 29.10.2018 at 14.00 in Dipartimento di Scienze della Formazione (DISFOR), Laboratory of Language and Social Cognition, Stanza 3c3, C.so Podestà 2, Genova.

The interview will be held on 31.10.2018 at 15.00 in Dipartimento di Scienze della Formazione (DISFOR), Laboratory of Language and Social Cognition, Stanza 3c3, C.so 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. Luca ANDRIGHETTO

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

Title: Social psychological variables in understanding metaphors.

Description: The research fellow will be involved in the research activity of the Laboratory of Language and Social Cognition (DISFOR - University of Genoa) directed by Prof. Andrighetto and Dr. Filippo Domaneschi. The work of the researcher will focus on an experimental research line concerning the social psychological factors involved in understanding metaphors. In particular, the researcher will be involved in the preparation and administration of two experimental works based on the use of both behavioral and neurolinguistic methods (E.g EEG) aimed at investigating the role of the gender and socioeconomic status of a language user in the comprehension of metaphorical utterances.

Scientific disciplinary sector: M-PSI/05 PSICOLOGIA SOCIALE

Place: Dipartimento di Scienze della Formazione (DISFOR)

Required degree:

Laurea V.O in: Lettere, o Lingue e civiltà orientali, o Lingue e Letterature straniere, o Psicologia.

Laurea Specialistica delle classi: 44/S Linguistica, o 58/S Psicologia.

Laurea Magistrale delle classi: LM-39 Linguistica, o LM-51 Psicologia.

Subjects of the interview:

The interview will focus on the specific skills of the candidate and on the adequacy of his/her profile with respect to the activity required by the research project. The candidate will be evaluated in particular with respect to her/his methodological skills and her/his knowledge of the linguistic and psycholinguistic theories taken into account in the research project.

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

RESEARCH PROGRAM NO. 38

The assessment criteria for the qualifications and the interview will be affixed on 29.10.2018 at 9.00 in Dipartimento di Economia (DIEC), Via Vivaldi 5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 29.10.2018 at 12.00 in Dipartimento di Economia (DIEC), Via Vivaldi 5, Genova.

The interview will be held on 29.10.2018 at 12.30 in Dipartimento di Economia (DIEC), Via Vivaldi 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. Barbara CAVALLETTI

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

Title: Quasi-orderings and partial orderings as instruments to analyze non-compensatory preference structures.

Description: The recipient will study applications of order theory (specifically, reflexive, transitive and incomplete binary relations, possibly anti-symmetric and positional, along with their extensions) to the analysis and the interpretation of non-compensatory preference structures. A comparison will be proposed with theories on dominant and lexicographic preferences, in the framework of the heuristics adopted in response to complex choice tasks. The analysis could potentially be developed on a theoretical ground, dealing with the opportune axiomatization of incomplete preferences extended through positional approaches, or could be conducted on empirical grounds, identifying latent classes of non-compensatory individual preferences in data from Discrete Choice Experiments and using opportune extensions of incomplete preferences to describe them.

Scientific disciplinary sector: SECS-P/03 SCIENZA DELLE FINANZE

Place: Dipartimento di Economia (DIEC)

Required degree:

Laurea V.O in: Economia e commercio.

Laurea Specialistica delle classi: 64/S Scienze dell'Economia, o 84/S Scienze economico-aziendali.

Laurea Magistrale delle classi: LM-56 Scienze dell'Economia, o LM-77 Scienze economico-aziendali.

Subjects of the interview:

Order theory and applications in economic theory (specifically, quasi-orderings and partial orderings); individual preferences, methods of elicitation of individual preferences in the environmental field (specifically, choice experiments); collective preferences and axiomatization of aggregations of collective preferences from profiles of individual preferences; publications in the candidate's CV.

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