

SCIENTIFIC DISCIPLINARY AREA MATHEMATICS AND INFORMATICS

RESEARCH PROGRAM NO. 1

The assessment criteria for the qualifications and the interview will be affixed on 04.09.2019 at 14:00 in Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN), 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 04.09.2019 at 18:00 in Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN), Via Montallegro 1, Genova.

The interview will be held on 05.09.2019 at 16:00 in Dipartimento di Ingegneria navale, elettrica, elettronica e delle telecomunicazioni (DITEN), 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. Stefano Gaggero on the phone number +39 010 3352389 or via the email address: stefano.gaggero@unige.it

Scientific coordinator: Prof. Stefano GAGGERO

NO. 1 research fellowship - Duration 2 year – Biennial pre-tax amount: € 52.331,40

Exclusive destination of the research fellowship to candidates who are 29th years old or below that age at the date of 15.6.2018 (publication notice of public date n. 422 of 13.6.2018 of Regione Liguria)

Title: Development of numerical tools for the design and analysis of ESD – Energy Saving Devices suitable for marine applications

Description: The proposed activity deals with the development of appropriate design and analysis strategies, based on optimization, for Energy Saving Devices suitable for marine application on semi-displacing and planning hulls. In particular, the activity will be focused on:

- A literature review of most promising ESD for marine application
- A numerical analysis of given configuration to assess possible improvements of the propulsive efficiency
- The development of a design tool to customize ESD for specific applications (depending on hull shape, rudder or propeller type for instance)

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:

ESD functioning concepts, Numerical approaches for the solution of RANS equations (and relative issues), Approaches for the definition of appropriate computational meshes (and relative issues), Numerical Optimization, Development of dedicated solvers in StarCCM+ / OpenFOAM environment.

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