ANNEX A TER

SCIENTIFIC DISCIPLINARY AREA: PHYSICS

RESEARCH PROGRAM NO. 55

The assessment criteria for the qualifications and the interview will be affixed on **20.12.2018** at **15.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **7.1.2019** at **13.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The interview will be held on **8.1.2019** at **15.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

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

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call) promptly contacting Prof. Flavio GATTI on the phone number +39 3421728719 or via the email address: flavio.gatti@unige.it.

Scientific coordinator: Prof. Flavio GATTI

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

Title: Cryogenic Anticoincidence for the X-ray space telescope ATHENA.

Description: The space telescope project for X-ray astrophysics, ATHENA, of the European Space Agency requires a detector that rejects cosmic rays in orbit around the lagrangian point L2 to reduce the background by 2 orders of magnitude at least. The detector is made with micromachining and thin film growth techniques. The prototypes are tested at 50 mK in dilution fridges with quantum interference electronics (SQUID). The goal of the study of this position concerns the simulation of the signal by studying the a-thermal phonons transport of and their interactions in the metal films of the sensors. The results will be verified with appropriate measurements for estimating the experimental parameters of the physical processes involved.

Scientific disciplinary sector: FIS/01 FISICA SPERIMENTALE

Place: Dipartimento di Fisica (DIFI)

Required degree:
Laurea V.O. in Fisica.
Laurea specialistica della classe 20/S Fisica.
Laurea magistrale della classe LM-17 Fisica.

Subjects of the interview:
- X-ray Astrophysics telescopes.
- Cryogenic detectors for cosmic origin x-rays and particles.
- Physics of solids at low temperatures.

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