AMMINISTRAZIONE CENTRALE
AREA GESTIONE DELLE RISORSE UMANE

SETTORE CONCORSI E SELEZIONI

UNIVERSITY OF L'AQUILA CENTRAL ADMINISTRATION HUMAN RESOURCES DEPARTMENT PUBLIC ANNOUNCEMENTS AND SELECTIONS OFFICE

ANNOUNCEMENT (ENGLISH SUMMARY)

DECREE OF THE RECTOR NO. 1439-2013 (G.U. NO. 89 - 12.11.2013)

Public selection procedure to appoint 1 full-time, temporary researcher for a period of 3 years, renewable for 2 more years (in compliance with Art. 24, paragraph 3/a of Italian Law no. 240, 30 December 2010) in the following Competition Sectors:

02/B1 - Experimental physics of matter – 02/B2 - Theoretical physics of matter

Scientific - Disciplinary Sector: FIS/03 - Physics of matter Department: Physical and Chemical Sciences

Research Projects:

PRIN ROAD-NGN Project Bell Labs Project

Project Summary:

PRIN Project: The ROAD-NGN project aims at studying and experimenting new technologies to enhance and facilitate the migration of wired access systems from copper to optical fibre, considering solutions enabling the so-called "Unbundling of the Local Loop" and that also allow for upgrading, within the 2020 horizon, towards ultra-capacity systems.

Bell Labs Project: The study targets the primary propagation effects in multimode fibres within high-capacity optical fibre communication systems based on spatial multiplexing; study of the fundamental limits of energy-efficiency in optical frequency communications, with the aim of assessing energy performance of current schemes and individuating better energy-efficiency solutions.

The following are the activities to be carried out:

Research

Investigating fibres and optical propagation effects in optical fibre communication systems based on spatial multiplexing in reference to the Bell-Labs Alcatel-Lucent Project.

Optical frequency/wavelength division of multiple access techniques and solutions for Next Generation Networks (ROAD-NGN CUP) in reference to the PRIN Project – 2011-2012.

Teaching:

Teaching activities in General Physics 2 Course within the Information Engineering and Telecommunications Engineering Degree Courses.

Integrated teaching activities for students:

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SETTORE CONCORSI E SELEZIONI

Acting as member in exam and graduation commissions; providing office-hours for students; assisting Bachelor-level and Master-level Degree students in their professional training programs, assisting students in preparing their degree thesis, both at Bachelor and Master-level.

Qualifications and Competence Required:

Ph.D. (Doctorate Degree) in Physics, or in Electrical and Information Engineering, or equivalency, conferred in Italy or abroad, together with documented experience in the field of optical fibre communication research

or, alternatively:

V.O. Degree (former Italian Master-level Degree) in Physics, or in Electrical and Information Engineering; or a corresponding Master-level Degree in accordance with Minister's Decrees 270/2004 and 509/1999, together with a professional CV documenting that the applicant is able to carry out research in the required fields specified for participation in this selection announcement.

Foreign Language Requisite:

English

Application Period: 12.11.2013 / 12.12.2013

To consult the complete text of this announcement (in Italian) please visit the corresponding webpage in our Italian site.

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