

***National Institute  
of Nuclear Physics***



**CONTEST TO AWARD  
A GRANT FOR STUDYING  
THEORETICAL PHYSICS**

# NATIONAL INSTITUTE OF NUCLEAR PHYSICS

Contest for the award of a grant to study theoretical physics

**no. 14625**

THE PRESIDENT

of the National Institute of Nuclear Physics

- given the regulation concerning the award of study grants, approved after deliberations of Council Directive 1963 and 2097, respectively on 25 January and 9 July 1985;
- given the deliberation of the Executive Committee on 13 September 2011 no. 9170, to ratify:

SETS IN PLACE

Art. 1

*GENERAL POINTS*

A contest is announced for the award of a grant to study theoretical physics, to be conducted at the *Sezione di Roma*, in the following fields:

*“Complex systems”*

Preference will be given to candidates who are qualified in theoretical understanding of multi-scale dynamics of brain networks, based on tools and concepts from the theory of disordered systems. Of particular interest will be multi-modular heterogeneous networks of neurons, the characterization of their state space and the associated hierarchy of time scales of their dynamics. He/she should have a background in one or more of the following subjects: modeling of complex systems; theory and simulation of stochastic processes; statistical mechanics of disordered systems; theoretical models of neural networks. A genuine interest in the theoretical understanding of brain dynamics is expected.

The winning candidate can choose one of the INFN Sections listed below as the location for using the grant:

**Roma, and Trieste.**

A copy of the contest details will be available from INFN Locations and on <http://www.ac.infn.it/>.

The grant may not be combined with other study grants, or with cheques or subsidies of a similar nature. It may not be combined with salaries or payments deriving from public or private funds.

The grant is not attributable to whoever has already been assigned grants from the INFN of a total duration of twenty-four months.

Where the winners of the present contest have already used study grants from the INFN for a period of less than twenty-four months, the new grant attributed can be used up to the completion of the limits given below.

Art. 2

*DURATION AND AMOUNT*

The study grant, of annual duration, is renewable for a further year according to articles 10 and 11 of the announcement.

The annual amount of the grant is € 28.000,00. This amount is gross and is paid in advance in monthly payments. The recipient of the grant can also use the canteen service in the same manner as INFN employees.

Travel costs from the grant holder's original location to the INFN site will be reimbursed, both at the start of the grant duration and at the end.

### Art. 3

#### *ADMISSION REQUISITES*

Foreign citizens and Italian citizens who have returned to Italy after a period of three years spent abroad may participate in the contest. Contestants must be younger than 35 on the deadline for presenting applications and they must have:

a PhD in Physics research, or an equivalent qualification even if obtained abroad;

or

a degree awarded according to the current regulations in D.M. 509/99 or a Specialist Degree or a Teaching Degree according to D.M. 270/04, in Physics or an equivalent qualification awarded in Italy or abroad which consisted of a professional scientific curriculum aimed at carrying out research, that included at least thirty months of postgraduate research of which at least two years were carried out at doctorate level in Italy or abroad.

*All the requisites for admission to the contest must be possessed on the deadline date for the presentation of the application as stipulated in art. 4.*

### Art. 4

#### *TERMS AND CONDITIONS OF THE PRESENTATION OF APPLICATIONS*

Applications, in electronic format, must be sent to the INFN by **20 October 2011**.

In order to enrol, candidates must fill in the application form on [http://www.ac.infn.it/personale/theo\\_fellowships/](http://www.ac.infn.it/personale/theo_fellowships/).

The application form must contain:

- a statement of research interests;
- a curriculum vitae;
- three reference letters (specifying name, surname and e-mail of each referee).

### Art. 5

#### *THE ADJUDICATING COMMISSION*

The adjudication committee is nominated at the *Sezione di Roma* with the contribution of the President of the INFN and meets after the deadline for the presentation of applications.

The commission gives a total of 100 points.

The qualifications that can be evaluated are:

- degree result;
- PhD;
- doctorate, or equivalent, course;
- specialist diplomas and postgraduate certificates, in Italy or abroad;
- carrying out research at public and private institutions, under contract or grant, whether in Italy or abroad;
- publications.

Art. 6

*APPROVAL OF THE LIST*

At the end of its work, the commission presents the minutes of its meetings which the list of merit.

The winner is the candidate in first place on the list formulated by the adjudicating commission.

The list is subject to approval by the Executive Council.

Art. 7

*AWARD OF THE GRANT, USE OF THE LIST*

The grant is conferred by the president of INFN.

In the fifteen days after receiving the letter which the INFN communicates the award of the grant, the winner must either accept or turn down the grant on the conditions given.

If the winner turns down the award or exceeds the deadline, the grant can be assigned, within two months of the approval of the list, to the candidate who second on the list with the approval of the President of the INFN.

Art. 8

*PAYMENT OF THE GRANT AND OBLIGATIONS OF THE WINNER OF THE GRANT*

The winner must start his/her research at the site assigned between October and December 2012; any requests to bring forward or postpone the start date will be assessed by the executive council of the INFN.

The winner of the grant is obliged:

- to start his/her activities within the dates given above at the site indicated in the confirmation letter;
- to carry out his/her activities regularly and without interruption for the entire duration of the grant;
- to observe all the internal regulations of the INFN.

The winner of the grant who, after starting his/her research activities, does not continue, without just motive, regularly and uninterruptedly for the entire duration of the grant, or who is guilty of serious and repeated misdemeanours or who does not show a good attitude towards carrying out the programme, can be removed from the programme, with justifications from the president of the INFN.

Interruptions in the grant programme can only be justified by serious health problems.

*RENEWING THE GRANT*

Art. 9

Between the sixtieth and the thirtieth day before the end of the first year of effectively using the grant, the

winner of the grant must send to the *Direzione Affari del Personale, Ufficio Borse di Studio e Assegni di Ricerca - Casella Postale 56 - 00044 Frascati (Roma)*, for the attention of the *Direttore della Struttura di assegnazione*, a report on the activities carried out, accompanied by a report by the tutor.

Art. 10

The president of the INFN assesses the renewal of the grant for the second year.

If the research activities have not been carried out correctly by the holder of the grant, the president may cancel further use of the grant.

Art. 11

*TREATMENT OF PERSONAL INFORMATION*

According to art.13 of D.Lgs. 30 June 2003 no. 196 personal information requested will be collected and treated at the central administration of INFN only for managing contest activities, also using IT procedures, in the manner and limits necessary for these ends.

Conferring data is necessary to evaluate the requisites of participation and the omission of qualifications possessed can bar this evaluation.

Those interested have the rights given in art. 7 of D.L. no. 196/03.

The person responsible for dealing with this information is named by the Director of the Personnel Department of the INFN.

THE PRESIDENT  
(*Prof. Roberto Petronzio*)

**September, 21, 2011**