Announcement n. 22425

POST-DOCTORAL FELLOWSHIPS IN THEORETICAL PHYSICS

The 2021/2022 INFN Fellowship Program offers 10 (ten) positions for research activity in Theoretical Physics.

Eligible candidates may be:
- Non-Italian citizens, or
- Italian citizens who, at the time of the application, hold a position in a foreign institution and have been continuously abroad for at least three years.

The Fellowship cannot be awarded to those who have already benefited from the INFN Fellowship for a total duration of twenty-four months.

If the winners of this competition have already benefited from INFN Fellowship for a period of less than twenty four months, the new Fellowship may be awarded up to the aforementioned limit.

Those who have already received a Fellowship of the same type with the INFN cannot participate in the call.

Applicants must have a Ph.D. degree (or an equivalent qualification), obtained no more than eight years prior to the call deadline, i.e. on or after November 9th, 2012. This time limit may be extended in case of:
- Maternity (18 months for each child born before or after the Ph.D. award, up to a maximum of 4.5 years);
- Paternity (effective time of leave taken for each child born before or after the Ph.D. award, up to a maximum of 4.5 years);
- National Service (effective time of leave taken after the Ph.D. award);
- Long-term illness, i.e. over 90 days, (effective time of leave taken for each incident occurred after the Ph.D. award).

The total elapsed time since the award of the PhD should not in any case surpass twelve years and six months. The reasons for an extension of the time limit must be duly documented only in case of a successful application. Failure in providing the appropriate documentation will result in the ineligibility for the appointment.

Candidates who are preparing their doctoral thesis are eligible to apply; however they must have obtained their Ph.D. degree by November 1st, 2021 or in any case before taking up their appointment with INFN.

The research topics of the 10 fellowships and the corresponding INFN sites are listed in Annex 1. Each candidate may apply up to a maximum of two fellowships.

The annual gross salary is 36,000,00 €. Each fellowship is initially granted for one year and may be extended for a second year. Travel tickets to and from INFN sites will be reimbursed at the beginning and at the end of the fellowship; also lunch tickets will be provided for working days.

Applications, in electronic form, must be submitted to INFN not later than November 9th, 2020 (11:59 a.m. CET) through the website https://reclutamento.dsi.infn.it/ReclutamentoOnline/

In the application the candidates must specify the date of their Ph.D., the selected research topic(s) and the corresponding INFN site(s) (up to a maximum of two) among those listed in Annex 1, and must include:
- a curriculum vitae;
- a publication list;
- the names and e-mail addresses of three referees, each of them may upload a reference letter not later than November 12th, 2020 (11:59 a.m. CET).

Italian applicants must also specify the foreign institution where they hold a position and must certify that they have been continuously abroad at least since November 9th, 2017.
Candidates will be excluded from participation in this call if they submit their application later than the deadline indicated.

Incomplete applications (lack of information or missing files) will not be considered.

The selection of the candidates will be based on:

1) the candidate's scientific quality, as shown by his/her CV and his/her track record of results achieved;
2) quality and relevance of the submitted scientific publications to be evaluated taking into account the specific research area and the candidate's career stage;
3) qualification of the candidate as attested in the submitted reference letters;
4) matching of the candidate's scientific experience and qualifications with the research topic of the scholarship.

For each fellowship primary consideration will be given to candidates working in the corresponding specific research topic; however candidates working in other subjects may be also considered.

At the end of the selection process, the results of the selection will be published at INFN website (Job Opportunities – Details of the announcement). Successful candidates will then receive an official communication from the INFN administration offices. The appointed fellows should start their fellowships not later than November 1st, 2021; however, special requests to defer the starting date can be considered.

Roma, 17th September 2020

ISTITUTO NAZIONALE DI FISICA NUCLEARE
Il PRESIDENTE
(Prof. Antonio Zoccoli)\(^1\)

\(^1\) Documento informatico firmato digitalmente ai sensi della legge 241/90 art. 15 c 2, del testo unico D.P.R. 28 dicembre 2000, n. 445, del D.Lgs. 7 marzo 2005, n. 82, e norme collegate, il quale sostituisce il testo cartaceo e la firma autografa
### ANNEX I

<table>
<thead>
<tr>
<th>INFN Section or Laboratory</th>
<th>Research Topic</th>
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<tbody>
<tr>
<td>1 Bari</td>
<td>Theory and Phenomenology of Fundamental Interactions</td>
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<tr>
<td>2 Bari</td>
<td>Neutrino Physics and Astrophysics: Theory and Phenomenology</td>
</tr>
<tr>
<td>3 Bologna</td>
<td>String and Gauge Theories: String Phenomenology and Exact Results</td>
</tr>
<tr>
<td>4 Catania</td>
<td>Modeling of Nuclear Structure and Low-Energy Reactions</td>
</tr>
<tr>
<td>5 LNF c/o Gruppo Collegato Cosenza</td>
<td>Excited States and Collective Excitations of Low-Dimensional Electrons</td>
</tr>
<tr>
<td>6 Napoli</td>
<td>Phenomenology of Fundamental Interactions within and beyond the Standard Model</td>
</tr>
<tr>
<td>7 Milano Bicocca</td>
<td>Lattice Field Theory for New Phenomena in Particle Physics</td>
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<tr>
<td>8 Perugia</td>
<td>Three-dimensional Partonic Structure of Hadrons and Nuclei</td>
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<tr>
<td>9 Roma Tor Vergata</td>
<td>Dark Energy and Modified Gravity Models in the light of Low-Redshift Observations</td>
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<tr>
<td>10 Trieste</td>
<td>Fundamental Problems in Quantum Physics</td>
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