TRANSLATION OF ANNOUNCEMENT FOR 1 RESEARCH POSITION

Decree no. 816/2023 dated 04.10.2023

Art.1 A public selection based on qualifications is hereby announced for 1 research position in the research field detailed in Annex 1. Full details, admission requirements and duration are listed in Annex 1.

Pursuant to Art. 7, par. 1, of the Italian Legislative Decree No. 165/2001, public administration bodies ensure gender equality and equal opportunities, as well as the absence of any form of direct or indirect discrimination on grounds of gender, age, sexual orientation, ethnicity, disability, religious belief and language, affecting access to employment, working conditions and economic treatment, vocational training, career advancement and workplace safety.

Art.2 Eligible candidates must be in possession of a scientific-professional curriculum which enables them to carry out research activity and meet the further requirements specified in Annex 1.

Personnel with permanent positions in Italian universities, public research and experimentation institutions, ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), ASI (Italian Space Agency) or institutions which award scientific degrees equivalent to PhD, in accordance with art. 74, par. 4 of the Italian Presidential Decree No. 382 dated 11.07.80, are excluded from applying.

In accordance with art. 18 of the Italian Law No. 240/10, candidates having a family relationship or other degree of kinship up to the 4th degree with the following persons are also excluded from applying:

- SISSA Professors belonging to the Area that requested the position;
- Director of SISSA;
- Secretary General of SISSA;
- Member of the Board of Directors of SISSA (please see Annex A).

The research fellowship is awarded through a private law contract which does not give any right to be employed by universities.

Art.3 The salary of the research fellowship detailed in Annex 1 is gross per year and includes contributions to be paid by the researcher. The fellowship is paid monthly in arrears. The fiscal and social security treatment of the research fellowship is in accordance with art. 4 of Italian Law No. 476 dated 13.08.84 and subsequent integrations and modifications, and par. 26 and followings of art. 2, Italian Law No. 335 dated 08.08.95 and subsequent integrations and modifications.

Area risorse umane
Ufficio gestione e sviluppo risorse umane

Via Bonomea, 265
34136 Trieste – Italy
T +39 0403787111
E ufficiorisorseumane@sissa.it
sissa.it

The School arranges for insurance coverage for the fellowship holders against accidents in the workplace and for third-party liability while they are carrying out their research work. The insurance premium is deducted from the fellowship.

Art.4   The fellowship cannot be held simultaneously with other fellowships of whatever kind, except those awarded by Italian or foreign institutions with the aim of integrating the research activity of the candidate through a period spent abroad.

Provided that they fulfil their research obligations, fellowship holders are authorized to carry out professional activity as long as the activity is compatible with the research position, does not pose a conflict of interest and is not prejudicial to the School. Fellowship holders willing to carry out an external activity on a continuous basis shall submit a specific request, which will be evaluated by the relevant Area Council and subsequently submitted to the Academic Senate of the School for approval.

If compatible with their research duties, and following written approval by the scientist responsible for the research project, fellowship holders can participate in research assignments commissioned to SISSA by third parties (pursuant to art. 66 of the Italian Presidential Decree No. 382/80), in accordance with the current regulations.

Fellowship holders cannot be enrolled in University Degree courses, PhD courses with scholarship or medical school of specialization in Italy or abroad.

Government employees must be given unpaid leave for the entire duration of the fellowship.

Art. 5   The qualifications required for the admission to the selection procedure shall be carried out by the examining board according to the following table:

Qualification	Evaluation criteria	Score
PhD	Relevance to the project	max 6 points
University Degree	Type of degree listed in the announcement - according to the degree mark	max 5 points
Published works and other research products	Relevance to the scientific disciplinary sector of the research project	max 30 points
Other post-lauream Degrees	Relevance to the scientific disciplinary sector	max 5 points

Other qualifications	Contracts, scholarships, enrollment in PhD degrees, periods spent abroad, etc., if any	max 14 points
TOTAL		**60 points**

A candidate is eligible if s/he scores at least 42/60 for qualifications.

To prove the equivalence of a qualification so as to meet the requirements described in Annex 1, the candidate must refer to the list of equivalences available on the website of the Italian Ministry of University and Research (http://www.mur.gov.it/web/guest/equipollenze-equiparazioni-and-between-titles-academic-italiani1).

Qualifications obtained abroad and declared equivalent by the Italian authority, according to the current legislation, will be accepted for the purposes of the selection procedure.

In the event of a foreign degree that has not already been declared equivalent in Italy according to the law (CIMEA - Academic Equivalence Mobility Information Center), the examining board may admit the candidate upon evaluation of his/her study plan and its consistency with the scientific sectors specified in Annex 1.

The qualifications evaluation criteria, which can be set by the examining board according to internationally recognised parameters, are consistency with the subject of the research fellowship, relevance and quality of the following qualifications and activities:

- proven research activity;
- academic qualifications (University Degree, PhD, specialization degrees or attendance certificates of other postgraduate specialization courses held in Italy or abroad);
- other qualifications.

For foreign degrees that have not already been declared equivalent in Italy according to the law, the candidate must attach a translation of the study plan into English and/or Italian.

The scientific qualifications must be relevant to the Area referred to in this announcement or to interdisciplinary subjects relevant to the areas involved.

Art.6 The examining board is appointed by decree of the Director of SISSA, upon a proposal of the relevant Area Council. It comprises a minimum of three and a maximum of five members, of which one shall act as President and one as Secretary. The members of the examining board shall be chosen among professors and researchers of SISSA, other research institutions

Area risorse umane
Ufficio gestione e sviluppo risorse umane

Via Bonomea, 265
34136 Trieste – Italy
T +39 0403787111
E ufficiorisorseumane@sissa.it

and universities, or among experts in the subjects referred to in this announcement. A deputy can be appointed for each member.

The examining board evaluates the qualifications according to the criteria indicated above (see the Table in Art. 5).

At the end of the evaluations the examining board will draw up a report, including the evaluation criteria, the total mark obtained by each candidate and a classification list of the eligible candidates. The acts of the selection procedure and the ranking are approved by Directorial Decree.

The first eligible candidate will undertake a research contract with SISSA in accordance with Italian Law No. 240/10, Art. 22, in its former version prior to Law No. 79 of 29.06.2022.

Being in the ranking does not give any right in other selection procedures.

Art.7   **Under penalty of exclusion, the application** for this selection procedure, along with the relevant qualifications held and relevant scientific publications, **shall be submitted online through the electronic application accessible at the following address:** https://pica.cineca.it/sissa/ar-fe-fisi-72-2023.

A valid email address is required for the registration process.

Applicants shall upload all personal and professional data as requested by the application procedure; all documents must be uploaded in .pdf format. Each applicant can produce a maximum of no. 30 publications and a maximum of no. 30 other titles and qualifications.

All fields in the online application form must be filled out. Under penalty of exclusion, the application must contain:

-    a curriculum vitae with a complete list of the candidate's scientific and professional activities;
-    a valid ID of the candidate, to be uploaded in electronic format.

Failure to comply with the online application procedure will result in the exclusion of the applicant from the selection.

Prior to final submission, and within the given deadline for applications submission, the online application procedure allows to modify and save the inserted information in a draft copy. Confirmation of final submission date will be certified by an automatic notification email. Submissions after the given deadline will not be accepted by the system, as the online application procedure won't be accessible.

The online application and submission procedure shall be completed **by November 9th, 2023, 11:59 p.m. CET (Rome time).**

The submission of the online application must be completed and finalized:

-    **with the digital signature of the candidate**, by means of smart card, USB token or remote digital signature allowing the applicant to digitally

Area risorse umane
Ufficio gestione e sviluppo risorse umane

Via Bonomea, 265
34136 Trieste – Italy
T   +39 0403787111
E   ufficiorisorseumane@sissa.it

sign electronic documents with a software using a PC or a web portal for Remote Signature, provided by a Certification Service Provider (CSP). Candidates with a smart card or a USB token for digital signature should check the compatibility with the Digital Signature system embedded in our server. In case of compatibility, candidates shall sign the application on the server (e.g. ConFirma);

- **holders of server-incompatible Digital Signature and holders of Remote Digital Signature** who can access a web portal for digitally signing electronic documents shall save the .pdf file generated by the system on their PC. The .pdf file shall not be modified in any way, and it shall be digitally signed in CAdES format: the system will generate a file with .p7m extension. The candidate shall upload the .p7m file on the system. No changes are to be made to the file by the candidates before the Digital Signature, on pain of exclusion from the selection procedure;

- **in case the two above-mentioned options do not apply**, candidates shall save the .pdf file generated by the system on their PC. The .pdf file shall not be modified in any way, on pain of exclusion from the selection procedure. The .pdf shall be printed out, signed on the last page, scanned in .pdf format and uploaded on the system.

For any technical issue regarding the application, candidates may send an email to sissa@cineca.it.

The University will verify that all the statements made in the application and accompanying documentation comply with the provisions of Presidential Decree No. 445/2000.

Art.8   After a budget verification has been carried out, the selected candidate will be formally notified of the award of the research fellowship.

Within 30 days from the start of the research activity at SISSA, Italian and EU candidates and non-EU citizens resident in Italy will have to submit a valid ID and fill out the following documents:

1) affidavit attesting birth, citizenship, place of residence and Italian tax code of the applicant;

2) affidavit attesting the possession of a University Degree and a PhD (only if required by the announcement);

Non-EU citizens authorized to sojourn in Italy owing to conventions between Italy and their own country have to submit the same above-mentioned documents.

Non-EU citizens regularly sojourning in Italy may submit an affidavit according to articles 46 and 47 of Presidential Decree No. 445/2000

exclusively for personal data and events which can be certified and attested by public Italian authorities.

In any other case, the information requested in points 1) and 2) of this article must be notified by means of an affidavit and plain copies of the relevant documents within 30 days from the beginning of the research activity at SISSA. However, within 60 days from the beginning of their research activity winners have to submit certificates and declarations issued by the foreign competent authorities, accompanied by an Italian translation authenticated by the Italian Consulate abroad. The School reserves the right to verify all affidavits.

Should the winner refuse the position, not accept it or fail to submit the above-mentioned documents on time, the research fellowship may be offered to the next eligible candidate in the classification list, following the authorization granted by the Director, at the express request of the Area Coordinator or the scientist responsible for the research activity.

The starting date of the fellowship shall be agreed with the Area Coordinator or with the scientist responsible for the research project.

Should the financial coverage not be guaranteed by the funding body, SISSA reserves the right not to activate the fellowships. The start of the contracts will therefore be subject to verification of the necessary financial coverage.

Art.9   Fellowship holders undertake to carry out the research activity as foreseen in the contract and in accordance with the research program of the Area.

The research activity is carried out in the frame of the research project for which the applicant has been selected. Every year fellowship holders must submit a report to the Area Council on the activity carried out in the previous year. In case of major non-compliance the contract can be terminated by decision of the School Senate and upon a reasoned proposal of the Area Council, having heard the researcher concerned.

The contract is automatically resolved in the following cases:

- unjustified delay or failure to start the research activity;
- unjustified suspension of the activity for more than 15 days;
- breach of the incompatibilities established by the current Rules for the awarding of research fellowship in SISSA;
- negative evaluation of the research activity expressed by the Area Council.

An authorized absence of up to 30 days a year does not require the fellowship to be suspended or the absence to be made up at a later date.

Fellowship holders wishing to resign must give a notice of at least 30 days, in which case no penalty shall be applied by SISSA. Failure to do so shall

Area risorse umane
Ufficio gestione e sviluppo risorse umane

Via Bonomea, 265
34136 Trieste – Italy
T +39 0403787111
E ufficiorisorseumane@sissa.it

result in a penalty involving the recovery or the failure to pay the salary for the period of notice not given. The 30 days' notice shall not be applied during the first 30 days of research activity.

SISSA shall reserve the right to terminate the contract if the external funding becomes unavailable. In this case SISSA shall give the fellowship holder at least a 60 days' notice. Failure to do so shall result in the payment to the research fellowship holder of an amount equal to the period of notice not given.

Art.10   The total duration of the research fellowship including the renewals must not exceed 6 years with the same fellow. To this end, the time in which the candidate was holder of a research fellowship and enrolled in PhD courses (without scholarship) is not taken into account for a period not exceeding the legal duration of the PhD program.

In accordance with the Italian Law No. 240/10, in its former version prior to Law No. 79 of 29.06.2022, candidates cannot be awarded research fellowships or temporary researcher contracts with public, private or online universities, nor with other institutions as specified in art. 22, par. 1 of Law No. 240/10 for a period exceeding 12 years, whether consecutive or not. To this end, the periods of absence due to maternity leave or state of illness are not taken into account.

The renewal of the research fellowship is decided by the School Academic Senate and, as for the financial coverage, by the Board of Directors, on the basis of an evaluation of the research activity carried out by the fellowship holder and the state of the art of the research program, upon request of the scientist responsible for the research activity.

Art.11   All matters regarding data processing and protection are in accordance with the Italian Legislative Decree No. 196/2003 dated 30.06.2003, as amended by Legislative Decree No. 101 dated 10.08.2018, that transposes Regulation (EU) 2016/679 (GDPR). All the data provided to this administration will be processed for the sole purposes connected with and instrumental to the selection procedure and the eventual drawing up and management of the contract.

THE DIRECTOR
Prof. Andrea Romanino
(Italian version digitally signed)

ANNEX 1
Physics Area
Public selection based on qualifications

Research title: **"Real-time dynamics of strongly anisotropic Ising systems"**

Fields of the research activity: The main aim of this activity is to develop and apply numerical techniques (tensor networks) to investigate Rydberg atoms in optical tweezers. This will be done along 2 research lines: non-local correlations in gauge theories, and critical phenomena.

Scientist responsible for the research activity: Prof. Mario Collura, Dr Marcello Dalmonte;
Members of the research group: Mario Collura, Marcello Dalmonte

Area 02 - Physics
Public selection sector: 02/B2 - Theoretical Condensed Matter Physics
Relevant academic scientific sector: FIS/02 - Theoretical Physics, models and mathematical methods

Duration of the research fellowship: 12 months
Renewable: yes
Gross remuneration per year: € 35,000.00

Requisites for the admission to the selection procedure:

University degree: Theoretical physics or similar discipline.

Proven experience in: Numerical techniques for condensed matter systems. Tensor network methods and real time dynamics.

Evaluation criteria:
PhD: up to 6 points
University degree: up to 5 points
Published works and other research products: up to 30 points
Further post-lauream diplomas: up to 5 points
Other titles: up to 14 points

Gross total cost of the research fellowship will be funded by the project R_ALTR-MIN_FARE_FISI_Dalmonte_0622 - Progetto FARE (R18HET5M5Y). Titolo progetto: "Many-body entanglement in programmable quantum hardware" - Prof. Dalmonte. (R_ALTR-MIN_FARE_FISI_Dalmonte_0622; CUP: G94I20000010001. Attività/Unità lavoro: costi rendicontabili; Ente finanziatore: MUR; Canale di finanziamento: FARE).

Area risorse umane
Ufficio gestione e sviluppo risorse umane

Via Bonomea, 265
34136 Trieste – Italy
T +39 0403787111
E ufficiorisorseumane@sissa.it

A contribution towards relocation expenses in Trieste is envisioned for the successful candidate if resident abroad (in the EU or outside the EU). The costs will be bared by the project R_ALTR-MIN_FARE_FISI_Dalmonte_0622 - Progetto FARE (R18HET5M5Y). Titolo progetto: "Many-body entanglement in programmable quantum hardware" - Prof. Dalmonte. (R_ALTR-MIN_FARE_FISI_Dalmonte_0622; CUP: G94I20000010001. Attività/Unità lavoro: costi rendicontabili; Ente finanziatore: MUR; Canale di finanziamento: FARE).

Position approved by:
Physics Area Council dated 11.05.2023
Academic Senate of the School dated 23.05.2023
Board of Directors of the School dated 30.05.2023