

D.S.G. 2/2023 of January 5<sup>th</sup>, 2022

**Subject:** Public selection procedure based on qualifications and interview for the recruitment of No. 1 fixed-term technologist at the Physics Area of SISSA, as per Article 24 bis of Law No. 240 of 30 December 2010 - "National Centre for HPC, Big Data and Quantum Computing" under the National Recovery and Resilience Plan (NRRP) – ref. prof. Baroni (position 1)

## THE SECRETARY GENERAL

Having regard to Law No. 168 of 9 May 1989, "Establishment of the Ministry of University and Scientific and Technological Research";  
Having regard to Law No. 241 of 7 August 1990, "New regulations on legislative procedures" and all subsequent amendments and additions;  
Having regard to Law No. 104 of 5 February 1992, "Framework Law for the assistance, social integration and the rights of people with disabilities" and all subsequent amendments and additions;  
Having regard to Presidential Decree No. 445 of 28 December 2000, "Consolidation Act of legislative and regulatory provisions on administrative documentation" and all subsequent amendments and additions;  
Having regard to Legislative Decree No. 165 of 30 March 2001, concerning the general rules of employment in the public administrations and all subsequent amendments and additions;  
Having regard to Legislative Decree No. 196 of 30 June 2003, "Code for the protection of personal data", as modified by Legislative Decree No. 101 of 10 August 2018, which transposes the EU General Data Protection Regulation 2016/679 (GDPR);  
Having regard to Legislative Decree No. 198 of 11 April 2006, "Code of equal opportunities between women and men", pursuant to art. 6 of Law No. 246 of 28 November 2005; Having regard to the Interministerial Decree of 9 July 2009 establishing the equivalence of second-cycle degrees awarded prior to Ministerial Decree 509/99 (*vecchio ordinamento*), pursuant to Ministerial Decree 509/99 (*lauree specialistiche, LS*) and pursuant to Ministerial Decree 270/04 (*lauree magistrali, LM*), for the purpose of participating in public selection procedures;  
Having regard to Law No. 240 of 30 December 2010, "Rules on the organization of Universities, academic staff and recruitment policies, and enabling the government to promote quality and efficiency in the university system", and Art. 24-bis in particular, which establishes the position of University Technologist on a fixed-term contract;

Having regard to Law No. 190 of 6 September 2012, “Rules for the prevention and repression of corruption and unlawfulness in public administration”;

Having regard to Legislative Decree No. 33 of 14 March 2013, as amended by Legislative Decree No. 97 of 25 May 2016, “Reorganisation of provisions on compulsory publicity, transparency and dissemination of information by Public Administrations”;

Having regard to Law No. 97 of 6 August 2013, “Provisions for fulfilling the obligations arising from Italy’s membership in the European Union- European Law 2013” and to Art. 7 in particular, which amends the provisions pertaining to access to jobs in the public administration;

Having regard to Law No. 125 of 30 October 2013, converting into law Legislative Decree No. 101/2013, “Urgent provisions for achieving rationalization goals in the public administration”;

Having regard to the Statute of SISSA, issued by Directorial Decree No. 40 of 18 January 2012, published in the Official Gazette No. 36 of 13 February 2012, in force since 28 February 2012;

Having regard to SISSA Regulation, issued with Directorial Decree No. 334 dated 06 July 2016, regarding the recruitment of technologists with a fixed-term contract pursuant to Art. 24 bis of Law No. 240 of 30 December 2010;

Having regard to the 2006-2009 National Collective Labour Agreement, University Section, and the National Collective Labour Agreements, Education and Research Section, for the three-year periods 2016-2018 and 2019-2021;

Having regard to the National Recovery and Resilience Plan (PNRR), submitted to the European Commission on 30 April 2021 pursuant to Article 18 of Regulation (EU) No. 2021/241 and approved by the ECOFIN Council on 13 July 2021, its resolution being notified to Italy by the Council’s General Secretariat by means of Note LT161/21 of 14 July 2021. The plan consists of 6 missions and 16 components, and having regard to Mission 4, Component 2 (M4C2) “From Research to Enterprise” in particular, which aims at supporting investment in research and development, promoting innovation and the dissemination of technologies, strengthening skills by fostering the transition to a knowledge-based economy, covering the entire chain of the research and innovation process, from basic research to technology transfer;

Having regard to the Guidelines defined by the Italian Ministry of University and Research for M4C2 system initiatives, approved by Ministerial Decree No. 1141 of 7 October 2021, shared with the NRRP Education and Research Steering Committee;

Given investment 1.4 of M4C2 “Strengthening of research structures and creation of “national R&D champions” in certain Key Enabling Technologies”, which aims at financing the creation of national research centres, selected through competitive procedures, that are able to reach, cooperating with universities, research centres and private companies, a critical threshold of research and innovation capacity;

Having regard to Directorial Decree No. 3138 of 16 December 2021, as amended by Directorial Decree No. 3175 of 18 December 2021, issuing a "Public Notice for the submission of Proposals for the Strengthening of Research Structures and the creation of R&D "national champions" in certain Key Enabling Technologies to be financed under the National Recovery and Resilience Plan, Mission 4 Component 2 Investment 1. 4 "Strengthening research structures and creation of "national R&D champions" in some Key Enabling Technologies", financed by the European Union - NextGenerationEU";

Given the participation of SISSA as a founding member in the "National Centre for HPC, Big Data and Quantum Computing" - "Simulation, Computation and Analysis of High Performance Data" for the implementation of the Research Programme "National Centre for HPC, Big Data and Quantum Computing" (aid application code: CN000013);

Given that, under MUR Directorial Decree No. 1031 of 17.06.2022, registered by the Court of Auditors on 14.07.2022 as No. 1880, the National Centre for HPC, Big Data and Quantum Computing, "Simulations, Computing and Analysis of HighPerformance Data", has been accepted for funding for the implementation of the Research Programme "National Centre for HPC, Big Data and Quantum Computing";

Having regard to the resolution of the Board of Directors dated 20 December 2022, based on the assent granted by the Academic Senate on 13 December 2022, authorizing the call of a public selection procedure to recruit a fixed-term technologist at the Physics Area, pursuant to Art. 24 bis of Law No. 240 of 30 December 2010, for maintenance, optimization, migration to HPC system with hybrid architecture, and distribution of computer codes for the quantum simulation of matter in the open-source Quantum ESPRESSO distribution, scientist responsible: prof. Stefano Baroni;

Having ascertained the financial coverage for this position of technologist, with a full-time, fixed-term contract lasting 30 months, mainly drawing on the economic resources granted by the following project: CN HPC PNRR - NATIONAL CENTRE FOR HPC, BIG DATA AND QUANTUM COMPUTING, Project Code (CUP): G93C22000600001. The necessary co-funding will be guaranteed by the resources related to the Joint Schools Programme envisaged under the 2021-23 Three-Year Programme (Ministerial Decree 289/2021), coordinated by Prof. Marco Paggi (IMT), local supervisor: Prof. Gianluigi Rozza, A\_SISSA\_PRO3\_MATE\_Rozza\_0747 - 2021/2023 Three-Year Programme

(Ministerial Decree No. 2503 of 9 December 2019) Joint Schools Programme,  
project title: "Scientific computing for natural and social sciences and applications:  
methodological and technological development" - Prof. Rozza, Project Code  
(CUP): G95F21001980006;  
Having decided to proceed;

## DECREES AS FOLLOWS:

### **Art. 1 - Position open to competition**

1. A public selection procedure based on qualifications and interview is announced for the recruitment of No. 1 fixed-term technologist, pursuant to Article 24 bis of Law No. 240 of 30 December 2010, for a full-time contract lasting 30 months (weekly time commitment: 36 hours). This position at the Physics Area is necessary for maintenance, optimization, migration to HPC system with hybrid architecture, and distribution of computer codes for the quantum simulation of matter in the open-source Quantum ESPRESSO distribution.
2. This Administration guarantees equal opportunities to male and female participants in accessing job posts and equal treatment at work, pursuant to Art. 7 of Legislative Decree 165/2001.

### **Art. 2 - Role, activities, skills**

1. Fields of the research activity: maintenance, optimization, migration to HPC system with hybrid architecture, and distribution of computer codes for the quantum simulation of matter in the open-source Quantum ESPRESSO distribution.

### **Art. 3 - Admission and Eligibility Requirements**

1. Italian and foreign candidates in possession of the following requirements are admitted to the selection procedure:

#### **Curricular requirements:**

- **University degree** (Master's of Science or second-cycle equivalent degree) in: Physics
- **PhD** in: Physics

If the degree required for admission to the competition has been awarded abroad, the candidate must submit a request for recognition of the foreign qualification to the Presidency of the Council of Ministers - Department of the Civil Service (Presidenza del Consiglio dei Ministri - Dipartimento della Funzione Pubblica) - pursuant to art. 38 of Legislative Decree no. 165 of 30 March 2001 (as amended by

Law Decree no. 228 of 30 December 2021, converted by Law no. 15 of 25 February 2022), and attach a copy of the receipt certifying that the procedure has been started. In this case, the candidate is admitted to the selection process with reserve and, should he/she be successful in the merit list, he/she is obliged - under penalty of forfeiture - to inform the Ministry of University and Research or the Ministry of Education, within fifteen days, of the publication of the approval of the acts and the merit list of this public procedure on the SISSA website, in order to issue the required recognition title. The equivalence measure must be compulsorily possessed at the time of recruitment.

Forms and information on how to apply for equivalence of a foreign qualification can be found at the following Internet address:

<http://www.funzionepubblica.gov.it/articolo/dipartimento/22-02-2016/modulo-larichiesta-dellequivalenza-del-titolo-di-studio-stranieri>

#### **Additional requirements: skills and abilities**

- proven experience in the development of high-performance scientific computing software;
- in-depth knowledge of Quantum ESPRESSO software will be an asset.

#### **General requirements**

- Full civil and political rights;
- Aged 18 or above;
- having met any obligation on military service under national laws;
- being physically fit for recruitment. The Administration will carry out the due checks, in accordance with the current regulations;
- not having a kinship or affinity up to the fourth degree with the Director, the Secretary General or a member of the Board of Directors of SISSA;
- not having been dismissed or relieved from employment in a Public Administration or any other public body pursuant to Art. 127, letter a) of Presidential Decree No. 3 of 10 January 1957.

In order to be admitted to the selection, candidates must meet the requirements by the application submission deadline.

Candidates are admitted provisionally to the selection procedure and can therefore be excluded due to a lack of compliance with the requirements at any time, through a reasoned decree of the Secretary General.

#### **Art. 4 - Applications for the selection procedure**

1. Under penalty of exclusion, the application for the selection procedure, along with all relevant documents, shall be submitted through the dedicated online application available at the following link:

<https://pica.cineca.it/sissa/2023-tecn-01>

2. The online application and submission procedure shall be completed by 11:59 pm of the thirtieth (30<sup>o</sup>) day after the publication date of this Notice in the Official Journal - IV Special Series - Calls and Exams Section (CET, Rome time). If the deadline falls on a day that is not a business day, it shall be extended to the next business day.
3. No other forms of submission of the application or any other relevant document is allowed.
4. A personal e-mail account is required to register on the online platform.
5. Candidates have to submit all required data to generate the application. All relevant documents have to be uploaded in .pdf format. Under penalty of exclusion, the application must be duly filled out, as indicated in the online procedure, and must include a valid ID. Before the deadline, and prior to final submission, the application can be saved as a draft so as to edit, refine and send it at a later time.
6. The application must be completed and finalized, signing the document in one of the following ways:

**Hand-written signature:** the document must be downloaded in .pdf format and it shall not be modified in any way. Candidates then have to print it, sign it, scan it into a .pdf file and upload it on the website.

**Digital signature through ConFirma server,** using hardware equipment (e.g. smart card or USB device with digital subscription certificate issued by a qualified certifying authority) compatible with the ConFirma service. The signed document must be downloaded in .pdf format and subsequently uploaded on the website.

**Digital signature on the candidate's own PC:** the document must be downloaded in .pdf format from PICA website. Candidates then have to sign it using a digital signature software or hardware equipment such as a smart card or USB device with digital subscription certificate issued by a qualified certifying authority. The .p7m file shall then be uploaded on the website.

7. If necessary, before the deadline candidates can withdraw an application which has already been sent and submit a new one. The date of electronic submission of the application is certified by the computer system by means of a receipt that will be automatically sent by e-mail to the address indicated by the candidate. Each application will be assigned an identification number, which has to be specified in any subsequent communication together with the code of the selection procedure that can be found in the electronic application. The online application and submission procedure shall be completed by 11:59 pm on the deadline of the

selection procedure (CET, Rome time). The system automatically denies access to the platform and submission of the application after the deadline. The service could be temporarily unavailable due to technical reasons. Requests for technical support and assistance may be sent to [sisso@cineca.it](mailto:sisso@cineca.it). This Administration will not be held responsible for errors or delays due to third parties, unforeseeable circumstances or force majeure.

8. In the application, candidates must clearly indicate their surname, name, date and place of birth, tax code and place of residence, specifying the address and ZIP code. In the application, candidates must indicate the address where any communications are to be sent, their phone number, cell phone number, and e-mail address. Any change must be promptly communicated to this School.

9. All candidates shall state under their own responsibility:

- that they hold Italian citizenship or the citizenship of another Member State of the European Union, or they are a family member of a citizen of a Member State of the European Union and hold the right of residence, or the right of permanent residence, or alternatively that they are a third-country citizen holding an EC long-term residence permit or hold refugee status or subsidiary protection status;
- if they are Italian citizens, that they are either registered on the electoral list in the city of residence, or no longer registered (please enlist the reasons for removal from the register/ failure to register);
- any criminal convictions they have had (even if they have been granted amnesty, pardon, remission or judicial pardon) and any criminal proceedings pending against them;
- the academic qualification required for admission to the selection procedure that they hold, specifying the year in which it was awarded and the institution which awarded it. Possession of a higher qualification does not replace the possession of any lower qualification required. For foreign qualifications, the equivalence with the corresponding Italian qualification will have to be explicitly declared.
- whether they meet any military obligation (for candidates born before 1985);
- that they are physically fit for recruitment for the position described in this notice;
- whether they have been employed in a public administration and the reasons for the termination of previous public employment relationships, if any;

- any preferential condition that gives right to preference, in the event of an equal score. Failure to declare any preferential condition in the application form entails that no preference can be given;
- Citizens of the member states of the European Union or their family members or citizens of non-EU countries, as per letter c) of art. 2 of this decree, must also declare that they enjoy civil and political rights in their country of origin, or the reasons why they do not, and that they have adequate knowledge of the Italian language.

10. Candidates with disabilities must specify in their application whether they need any aid and/or additional time at the interview. Pursuant to Art. 4 and Art. 20 of Law 104/1992, both requests must be supported by a medical certificate issued by a competent public health authority.

11. The Administration cannot be held responsible for misdirected communications due to incorrect contact details given by the applicant, or late/missing communication of changes of the contact details indicated in the application.

#### **Art. 5 - Appointment of the Evaluation Committee**

1. The Evaluation Committee is appointed by decree of the Secretary General, according to Art. 4 of the SISSA's Regulation for the recruitment of fixed-term Technologists pursuant to Art.24 bis of Law No. 240 of 30 December 2010, issued by Directorial Decree No. 334 of 6 July 2016.

#### **Art. 6 - Evaluation procedure**

1. The Evaluation Committee verifies knowledge, skills, attitudes and motivations of the candidates in relation to the professional profile required through an evaluation of the qualifications and an interview, according to art. 7 and 8 of this notice.

#### **Art. 7 – Assessment of qualifications**

1. The Committee evaluates the qualifications according to predefined criteria, related to parameters recognized at an international level such as relevance, significance and quality.

A maximum score of 30 points is attributed to the qualifications distributed as follows:



QUALIFICATION	CRITERIA	SCORE
Publications and technical/scientific output	<ul style="list-style-type: none"><li>• Originality, innovation, relevance of the submitted work, especially with reference to the activity described in this call;</li><li>• Continuity of the scientific production;</li><li>• Scientific relevance of the publisher of the submitted publications</li></ul>	max 15 points
Professional qualifications: experience and past duties	<ul style="list-style-type: none"><li>• Relevance and continuity of the positions held, previous responsibilities</li><li>• Pertinence of previous activity with the research field of this call</li></ul>	max 15 points

All qualifications will be evaluated according to relevance to the subject of this announcement, skills and specific knowledge required.

2. Qualifications have to be held on the date of submission of the application.

3. Self-certifications must be clear and detailed, to enable the Evaluation Committee to carry out a proper assessment. The periods of duty mentioned in Annex B must be stated using the day/month/year format. Failure to submit a complete description of the period of service, e.g. stating only the month and year, entails that the evaluation will be carried out by default, taking the last day of the month in which the period began, and the first day of the month in which the period ends.

4. The total score for the qualifications cannot exceed 50% of the overall score.

5. The Administration will carry out checks on the self-certified data, also on a random basis. Under Article 76 of Presidential Decree No. 445 of 28 December 2000, the submission of false declarations, false documents and the use thereof shall be punished according to the Penal Code and special laws.

6. Non-European Union citizens can submit self-certifications only to prove status, facts and personal qualities which can be certified by Italian public institutions, or in application of international conventions between Italy and the country of origin of the applicant. If the documents are written in a foreign language other than English, they must be translated into Italian by a recognized authority/Embassy or by an official translator. In all other cases, non-EU citizens must produce qualifications in original or certified copy.

## Art. 8 - Interview

1. The interview will focus on knowledge and skills that characterize the position of this selection procedure. The knowledge of the English language will also be evaluated. The Commission may award up to 30 points for the interview.
2. Candidates are eligible if they score at least 21/30 at the interview.
3. The interview may be held in person at the SISSA offices in Via Bonomea n. 265 - 34136 Trieste, Italy, or in telematic mode via audio/video connection between committee members and candidates via Skype or Zoom platform, or in any other remote telematic mode that guarantees effective participation and interaction between commissioner and candidate, capable of ensuring clear mutual understanding and in such a way as to guarantee recognition of the identity of the candidates.
4. The convocation to the interview with the indication of the dates will take place by means of a notice published on the dedicated SISSA website by 20 January 2023 at the following address  
<https://www.sissa.it/recruitment?search=&status=All&area=All&posizione=3404>
5. This publication acts as an official notification. No further notice is envisaged. Candidates will show up with a valid identification document at the place, day and time indicated above. Failure to attend the interview shall be considered as an explicit and final withdrawal from the selection procedure.

## Art. 9 – Identity documents

To attend the interview candidates must show one of the following identity documents:

- identity card, passport, post office card, firearms certificate or driver's license;
- recent photograph applied on stamped paper, with the candidate's signature authenticated by the mayor or by a notary.

The abovementioned documents must be valid.

## Art. 10 - Constitution, approval, duration and publication of the ranking

1. Once the selection procedure is over, the ranking is approved by decree of the Secretary General and is the result of the marks obtained by each candidate for the assessment of the qualifications and at the interview. In case of equal score, preference is given to the youngest candidate.
2. The candidate with the highest score is declared the winner, subject to verification of the requirements for the admission to employment.
3. The ranking and the announcement of the winner will be published on SISSA official register and website. Notice of such publication will be given in the Official Gazette of the Italian Republic - 4th special series. The deadline for any appeals will start from the day following the publication of said notice.
4. The ranking is valid for 24 months from the publication on SISSA official register.

## **Art. 11 - Establishment of employment relationship and contract**

1. The winner of the selection will be invited to enter into an individual fixed-term employment contract with SISSA for a period of 30 months, for the position of Technologist, within the deadline indicated in the invitation note. After the deadline, which can be extended upon request of the candidate in case of proven and justified impediment, the employment contract will not be stipulated.
2. The employment relationship is governed by the individual contract by the current legislation on employment, also with regard to tax treatment, welfare and social security. La SISSA also provides insurance coverage for accident risks and public liability.
3. The total gross annual remuneration is all-encompassing and amounts to EUR 38,018.76 (equivalent to level EP3). The overall cost of the contract, including administration charges, will be covered by the project CN HPC PNRR - NATIONAL CENTRE FOR HPC, BIG DATA AND QUANTUM COMPUTING - Project Code (CUP): G93C22000600001. The residual co-funding amount can be covered by the Joint Schools Programme envisaged under the 2021-23 Three-Year Programme (Ministerial Decree 289/2021), coordinated by Prof. Marco Paggi (IMT), local supervisor: Prof. Gianluigi Rozza: A\_SISSA\_PRO3\_MATE\_Rozza\_0747 - 2021-2023 three-year programming (Ministerial Decree No. 2503 dated 9 December 2019) Joint Schools Programme, project title: "Scientific computing for natural and social sciences and applications: methodological and technological development" - Prof. Rozza, Project Code (CUP): G95F21001980006.
4. The working time is an average of 36 hours per week over a three-month period and is adjusted to the needs of the research project, to the tasks given and to the time schedule of the structure in which the employee operates, taking into account the organizational criteria of SISSA.
5. This contract does not give rise to any right regarding access to employment in the academic or technical / administrative staff of the School.
6. The winner will be subject to a probationary period of four weeks. This trial period may not be renewed or extended. If at the end of the probationary period there is no negative assessment from the person responsible for the project, the trial is considered as successful. In the event of a negative assessment, the relationship is automatically terminated without notice.
7. At any time during the trial period, either party may terminate the relationship without notice nor compensation in lieu of notice, except in cases of suspension within the trial period. The withdrawal is effective from the date of notification to the other party. The withdrawal of the School must be motivated.
8. Once the trial period ends, if no withdrawal has occurred, the employee is confirmed in duty and s/he shall be accorded seniority from the date of recruitment for all purposes.
9. If the selection procedure is revoked, the contract is terminated in any case, with

no obligation of prior notice.

10. The cancellation of the recruitment procedure, which is a precondition for employment, causes the termination of the contract without prior notice.

11. The contract may be extended pursuant to Art. 24-bis of Law 240/2010, subject to verification of persisting organizational needs and the availability of research funds. The total duration of the contract, including any extension, may in no case exceed five years.

12. For anything that is not expressly covered in this announcement, reference shall be made to the provisions of the current Regulations and to the Collective National Labour Agreements for personnel of the University Section and Education/Research Section.

### **Art.12 - Overlapping - incompatibility**

1. The aforementioned contract cannot be held concurrently with other similar contracts, even in other universities or private scientific institutions, nor with PhD/research/post-graduate fellowships.

2. The fixed-term technologist position is incompatible with trade and industry activities. Freelance activities are only compatible with part-time work of no more than 18 hours per week.

### **Art. 13 - Submission of documents for employment**

1. Within thirty days of entering into the individual employment contract, the ill be asked to provide documents or to sign a self-declaration as proof of the possession of the requirements stated in this notice.

2. For the purpose of verifying physical fitness for continuous and unconditional employment, the employee will undergo a medical examination carried out by SISSA's Medical Officer.

### **Art.14 - Personal Data Handling**

1. Pursuant to Legislative Decree No. 196 of 30 June 2003, as amended by Legislative Decree No. 101 of 10 August 2018, which transposes the EU General Data Protection Regulation 2016/679 (GDPR), all personal data provided by candidates will be processed for the sole purposes connected with and instrumental to this selection procedure.

2. The transmission of personal data is required for the evaluation and selection procedure.

### **Art.15 - Head of procedures**

1. Pursuant to Art. 5 of Law 241/90, the Head of procedures is Dr. Alessandra Lucatello, Chief of Human Resources Area of this School - tel: 0403787219/226 – fax 0403787249 – e- mail: [ufficiorisorseumane@sissa.it](mailto:ufficiorisorseumane@sissa.it).

Art.16 – Final provisions.

For anything that is not expressly covered in this notice, reference shall be made to current norms and provisions, where applicable.

THE SECRETARY GENERAL  
dott. Marco Rucci  
(Italian version signed digitally)