





# SELECTION PROCEDURE FOR A COMPARATIVE EVALUATION FOR QUALIFICATIONS AND EXAMS FOR AWARDING OF N. 1 TYPE B GRANT FOR CARRYING OUT RESEARCH ACTIVITIES

(pursuant to Article 22 of Law no. 240 of 30 December 2010 and subsequent amendments in the text in force until 29.6.2022).

#### THE HEAD OF MIFT DEPARTMENT

IN VIEW OF the Statute of the University of Messina Autonomy, issued with the Rector's Decree (D.R.) n. 1244 of May 14th, 2012 and subsequent amendments and integrations;

**IN VIEW OF** the Decree of the President of the Republic (D.P.R). n. 445 of December 28th, 2000 and subsequent amendments and integrations;

**IN VIEW OF** the Law n. 240 of December 30th, 2010 and particularly article 22 which deals with the modalities for assignment of the Research grant of University of Messina;

**IN VIEW OF** the Ministerial Decree (D.M.) n. 102 of March 9th; 2011 which determined the gross minimum annual amount of the Research grant in accordance with the abovementioned law;

**IN VIEW OF** the Regulation of the University of Messina concerning Research grants as amended by Rectoral Decree no. 81 of 16 January 2020

the Law no. 79 of 29 June 2022 "Conversion into law, with amendments, of Decree-Law no. 36 of 30 April 2022, containing further urgent measures for the implementation of the National Recovery and Resilience Plan (PNRR)" and in particular art. 14, paragraph 6 -quaterdecies, as amended by art. 6, paragraph 1 of Legislative Decree no. 198 of 29 December 2022, converted with amendments by Law no. 14 of 24 February 2023, which establishes that "until 31 December 2023, limited to resources already programmed or approved by the respective governing bodies within the aforementioned term, universities (...) They may issue procedures for the awarding of research grants pursuant to Article 22 of Law no. of 30 December 2010. 240, in the version in force before the date of entry into force of Law (...)" n.79/2022;

**IN VIEW OF** The WORK PROGRAMME 2021-2022 of the Marie Skłodowska-Curie Actions (MSCA), within the Horizon Europe Programme, considered the decision of the European Commission C (2021) n. 4200 of 15 June 2021;

IN VIEW OF the project proposal "TOPOCOM- "Topological solitons in ferroics for unconventional computing", funded by the Grant Agreement number 101119608 HORIZON-MSCA-2022-DN-01 finalized to enrol n. 11 Doctoral Candidates to be awarded with a doctoral degree;







### **IN VIEW OF**

the resolution of the Council of Administration. n. 23995 of 28/04/2023 which, among other things, entrusts the administrative and accounting management of the Project to the MIFT Department;

#### IN VIEW OF

the abstract of the minutes of the Steering Committee of Department of Dipartimento di Mathematics and Computer Science, Physical Sciences and Earth Sciences, of 20 September 2023, concerning the approval of the request to activate a Research grant (*tenure track position*, contract typeB), submitted by Professor Giovanni Finocchio, for research activity entitled "*CUDA-native numerical solver for micromagnetic and microelectric calculations*" (Area CUN: 09 – Industrial and information engineering, S.S.D: 09/E1), related to the project proposal "TOPOCOM.

The personnel cost will be coveredby the Grant Agreement number: 101119608 — HORIZON-MSCA-2022-DN-01 - TOPOCOM awarded to Prof. Giovanni Finocchio, as Principal Investigator, linked to the Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences - MIFT - of the University of Messina

#### IN VIEW OF

Bilancio Unico d'Ateneo – Esercizio Contabile 2023\_ provides the necessary economic coverage on the Grant Agreement number: 101119608 — HORIZON-MSCA-2022-DN-01.

### **DECREES**

### Art. 1 Indiction

- 1. A comparative evaluation procedure is launched, for qualifications and examinations, aimed at conferring no. 1 type B research grant, pursuant to Article 22, paragraph 4, letter b), of Law no. 240 of 30 December 2010 and subsequent amendments in the version prior to Law no. 79 of 29.6.2022 and of the University Regulations for the awarding of research grants.
- 2. The research topic and the structure where the research activity will be carried out are indicated in Annex A, which is an integral part of this call.
- 3. The research grant has a duration of 36 months, and is not-renewable.

# Art. 2 General admission requirements and incompatibilities

1. Those who meet the following requirements\_can participate in the selection, without age and citizenship limitations:







- a. Master's degree/Master's degree/old system (vecchio ordinamento) concerning the scientific disciplinary area of relevance obtained in Italy or the equivalent qualification obtained abroad
- b. knowledge of the foreign language listed in Annex A.

  It is also required that candidates are in possession of a <u>scientific-professional curriculum</u> suitable for carrying out the research activity.
  - The suitability of the foreign qualification will be ascertained by the Commission, for the sole purpose of this selection, in compliance with current legislation, in Italy and in the country where the qualification was issued, and with international treaties or agreements on the recognition of qualifications for the continuation of studies.
- c. due to the EU MSCA DN mobility rules, we cannot recruit applicants that have resided or carried out their main activity (work, studies, etc.) in Italy for more than 12 months in the 3 years immediately before the deadline of the application.
- 2. The admission requirements and any qualifications **must be met** on the date of the deadline for submitting the application for admission.
- 3. Pursuant to Article 18, paragraph 1, point c) of Law no. 240 of 30 December 2010, those who have a degree of kinship or affinity, up to and including the fourth degree, with a professor belonging to the Department or the Structure making the call or with the Rector, the General Manager or a member of the University Board of Directors cannot participate in the procedure, pursuant to Article 18, paragraph 1, point c) of Law no. 240 of 30 December 2010.
- 4. Research grants **cannot be** awarded also to the following categories:
  - a. to the permanent staff of universities and institutions and public research and experimentation bodies, of the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and of the Italian Space Agency (ASI), as well as institutions whose scientific specialization diploma has been recognized as equivalent to the title of PhD pursuant to art. 74, paragraph 4, of Presidential Decree no. 382 of 11 July 1980.
    - The ownership of the allowance entails, for employees in service in public administrations, other than those indicated above, the placement on leave without checks for the duration of the research grant.
  - b. to those who have been recipients of research grants pursuant to Law 240/2010 for a period that, added to the duration provided for in the contract banned, exceeds a total of 6 years. In the aforementioned period, any renewals are taken into account, excluding the time frame in which the grant was used to coincide with the PhD, within the maximum limit of the legal duration of the relative course;
  - c. to those who have been recipients of research grants and fixed-term research contracts, respectively pursuant to Articles. 22 and 24 of Law 240/2010 at the University of Messina or at other Italian universities, state, non-state or telematic, as well as at the bodies referred to in paragraph 1 of art. 22 of Law 240/2010 for a period that, added to the duration provided for in the contract banned, exceeds a total of 12 years, even if not continuous.
  - For the purposes of the duration of the aforementioned relationships, periods spent on maternity leave or for other reasons according to current legislation are not taken into account.
- 5. The winner of the selection will be enrolled in the PhD program of Physics at the University of Messina. This enrolment is not compatible with undergraduate, specialist or other master's







degree courses, with scholarship or specialization school in the medical area, in Italy or abroad, as well as with enrolment in another school / course that, providing for compulsory attendance, prevents the performance of the activities provided for the contract.

- 6. The grant **cannot be combined** with scholarships for any reason conferred except those granted by national or foreign institutions useful to integrate, with stays abroad, the research activity of the holders. The grant **cannot be combined** with employment and with other checks or contracts for collaboration in the research activity.
- 7. The holder of a research grant <u>may carry out</u> a limited activity of self-employment, subject to written communication and agreement with the responsible teacher, provided that this activity does not involve conflict of interest and is declared compatible with the regular conduct of the research activity by the structure concerned. The assessment of compatibility and absence of conflict shall be adequately justified. The research fellow can carry out orientation and tutoring activities and assistance to the exams as an expert in the subject.
- 8. The Department may at any time order the **exclusion** from the procedure for lack of the prescribed requirements or the forfeiture of admission and / or benefits obtained.

# Art. 3 Application form

1. The application for admission to the evaluation procedure, as well as the qualifications held, documents and publications deemed useful for the competition must be **submitted**, **under penalty of exclusion**, **electronically**, using only the appropriate IT procedure made available at WEB <a href="https://pica.cineca.it/unime/">https://pica.cineca.it/unime/</a>

The online application system will require an e-mail address of the applicant for the registration of the application.

The candidate must enter all the data required to fill the application, the attached documents should be in PDF format.

### No other submission procedures are allowed.

By the deadline, the system allows saving the application in draft mode. The date of electronic submission of the application for participation in the selection is certified by the computer system by means of a receipt that will be automatically sent by e-mail. At the end of the submission deadline, the system will no longer allow access and submission of the electronic form.

To each application will be assigned an identification number which, together with the competition code indicated in the computer application, must be specified for any subsequent communication.

The procedure for completing and sending the application electronically must be completed no later than 12.00 (Italian time) on December 1st, 2023.

The submission of the application form must be completed and concluded as follows:

- **by manual signature:** to manually sign the document you must download the PDF file generated by the system on your computer, and, without modifying it in any way, print it, put handwritten signature on the last page of the document, scan it into a PDF file and upload it to the system.
- by digital signature on the ConFirma server: to digitally sign the document it is necessary to have a hardware equipment (for example smart card or USB device with digital







subscription certificate issued by an accredited Certifier) compatible with the ConFirma service; after signing it will be possible to download the signed PDF;

- by digital signature on the PC: to digitally sign the document it is necessary to have hardware (for example smart card or USB device with digital certificate of subscription issued by an accredited Certifier) and digital signature software with which to generate, starting from the PDF file of the document downloaded from the site, the signed file in pdf.p7m format to be reloaded on the site itself.

The application, under penalty of exclusion, must contain all the data required in the electronic procedure and must be signed and accompanied by a valid identification document of the candidate.

# If the candidate registers for the IT procedure using the Spid credentials, the signature to be affixed to the application is not required.

For any technical problems, candidates can contact CINECA support via the <u>link</u> in the footer of the PICA procedure pages related to the call.

- 2. In the application, the candidate must declare, pursuant to Presidential Decree no. 445 of 28 December 2000 and subsequent amendments:
  - a. name and surname;
  - b. date and place of birth;
  - c. citizenship;
  - d. tax code (only Italian citizens);
  - e. residence and address for service for the purpose of participating in the proceedings;
  - f. that you have no criminal convictions and that you do not have any ongoing criminal proceedings (if not, indicate which ones); the qualifications held: PhD degree concerning the relevant scientific disciplinary area, or the possession of an equivalent qualification obtained abroad or a master's / specialist / old system master degree concerning the scientific disciplinary area of relevance obtained in Italy or the equivalent title obtained abroad see annex A;
  - g. Master's degree/Master's degree/old system (vecchio ordinamento) concerning the scientific disciplinary area of relevance obtained in Italy or the equivalent qualification obtained abroad.
  - h. The suitability of the foreign qualification can be ascertained by the Commission, only for the purposes of this selection, in compliance with the regulations in force;
  - i. to have knowledge of the foreign language in accordance with Annex A;
  - j. not to have a degree of kinship or affinity, up to and including the fourth degree, with a professor belonging to the Department or to the Structure that makes the call or with the Rector, the General Manager or a member of the University Board of Directors;
  - k. not to belong to the permanent staff of universities and institutions and public research and experimentation bodies, of the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and of the Italian Space Agency (ASI), as well as of institutions whose scientific specialization diploma has been recognized as equivalent to the title of PhD pursuant to art. 74, paragraph 4, of Presidential Decree no. 382 of 11 July 1980;
  - 1. not to carry out employment or to be aware that the ownership of the allowance entails, for employees in service with public administrations other than those referred to in the previous point, the placement on leave without checks for the entire duration of the







allowance and not to be the beneficiary of other checks or contracts of collaboration in the research activity;

- m. not to have been the recipient of research grants pursuant to Law 240/2010 for a period that, added to the duration provided for in the contract banned, exceeds a total of 6 years. In the aforementioned period, any renewals are taken into account, with the exception of the period in which the grant was used to coincide with the PhD, within the maximum limit of the legal duration of the relative course.
- n. not to have been the recipient of research grants and fixed-term research contracts, respectively pursuant to articles 22 and 24 of Law 240/2010 at the University of Messina or at other Italian universities, state, non-state or telematic, as well as at the bodies referred to in paragraph 1 of art. 22 of Law 240/2010 for a period that, added to the duration provided for in the contract put out to tender, exceeds a total of 12 years, even if not continuous;
- o. to be aware that this position will run together with the PhD programme in Physics of the University of Messina, and it is not compatible with other PhD programs.
  - with enrolment in degree courses, specialist or master's degree courses, other PhD with scholarship or specialization school in the medical area, in Italy or abroad, as well as with enrolment in another school / course that, providing for compulsory attendance, prevents the performance of the activities provided for in the contract;
  - with the use of scholarships for any reason awarded, except those granted by national or foreign institutions useful to integrate, with stays abroad, the research activity;
  - with enrolment in courses that, by providing for compulsory attendance, prevent the performance of the activities provided for in the contract;
  - with employment and with other grants or contracts of collaboration in the research activity;
- p. The <u>candidate with disabilities</u> must specify, in the application form, the necessary assistance in relation to their disability and the possible need for additional time, documented by a suitable certificate issued by the competent public health facility for the territory, pursuant to Law no. 104/92, as amended by Law no. 17/99.
  - The <u>candidate diagnosed with specific learning disabilities (SLD)</u>, must specify, in the application form, the necessary compensatory tools and any need for additional time, documented by appropriate certification issued for no more than three years by structures of the NHS, or by specialists and structures accredited by the same, pursuant to Law no. 170/2010 and subsequent guidelines Ministerial Decree no. 5669, July 12, 2011.
  - For any information, the candidate can contact the "Disability Services/DSA" Operating Unit of the University, located in via Consolato del Mare, n. 41, Palazzo Mariani, Messina e-mail: udisabili@unime.it, tel. 090 676 8986/5066.
- 3. At any time during the procedure, the University may verify on the veracity of the statements produced. In case of false declarations, the Department may at any time, the Director of the Department may <u>order the exclusion</u> of candidates from the selection procedure, or <u>forfeiture</u> of the assignment and any benefits acquired, without prejudice to the criminal responsibilities deriving from this.
- 4. Applicants must attach to the application:
  - a. the curriculum vitae in Europass format of the scientific-professional activity signed and dated;







- b. the list of publications and titles;
- c. the publications and/or titles whose evaluation is requested;
- d. any health certification for disability or SLD;
- e. scanned copy of a valid photo identification document;
- f. Doctoral Network Declarations: that at the time of recruitment by the beneficiary, the DC must not have resided or carried out his/her main activity (work, studies, etc...) in the country of the beneficiary for more than 12 months in the 3 years immediately prior to his/her recruitment under the project. Compulsory national service and/or short stays such as holidays are not taken into account.) and have not been awarded a doctoral degree;
- g. Candidates who are EU and non-EU citizens in possession of a foreign qualification (s) obtained in NON-EU countries must attach the certificate of the qualification (s) held by which it emerges
  - the duration of the Study Programme;
  - the indication of the University that awarded the degree;
  - the date of achievement and the final grade;

with attached a translation into Italian or English, declared in conformity with the text by the competent diplomatic or consular representations abroad; the securities referred to in Article 5 below that are considered useful for the purposes of evaluation by the Evaluation Committee;

- h. health certification for disability or SLD;
- 5. Scientific publications published by the deadline of the call **may be evaluated for this procedure**.
- 6. The attached publications must be declared as conforming to the originals by means of a substitutive declaration of the deed of notoriety pursuant to articles 19 and 47 of Presidential Decree no. 445 of 28 December 2000 and subsequent amendments. (point 4.3 of the request to participate).
- 7. Candidates can also demonstrate possession of the qualifications indicated above by self-declaration pursuant to Presidential Decree no. 445 of 28 December 2000 and subsequent amendments.

They can make use of self-certifications, as expressly provided for in Articles. 46 and 47 of Presidential Decree no. 445/2000 and subsequent amendments:

- Italian and EU citizens;
- citizens of countries outside the European Union, legally residing in Italy, <u>limited</u> to states, personal qualities and facts certifiable or attestable by Italian public entities (specifically: qualification obtained at an Italian University).
- 8. The documents listed above must be inserted in the platform, in pdf format (whose maximum size must not exceed 30 MB), in the "attachments" section.
- 9. The Department assumes no responsibility for any misunderstandings attributable to the fact of third parties, unforeseeable circumstances or force majeure and related to the forwarding of the application.







- 1. The evaluation commission is appointed, after the deadline for submitting applications for participation in the competition, with a special Decree of the Director of the Department, on the recommendation of the responsible of the research program and approval of the Council of the department and is composed of four tenured professors and / or university researchers, of which three effective and one alternate, belonging to the same scientific disciplinary area of the responsible of the research program, who, unless expressly renounced, is part of the Commission and assumes the functions of President. The Commission must complete its work within thirty days of the deadline for submitting applications.
- 2. The Evaluation Committee, in the first session, establishes the evaluation criteria of the candidates, with regard to the qualifications presented, which will be advertised on the website of the University <a href="https://www.unime.it/bandi-e-concorsi/assegnisti-di-ricerca-bandi-attivi">https://www.unime.it/bandi-e-concorsi/assegnisti-di-ricerca-bandi-attivi</a> -. It then carries out a comparative evaluation of the candidates on the basis of the qualifications presented and an interview.

### Art. 5 Comparative evaluation of candidates

- 1. The comparative evaluation aims to ascertain the candidate's preparation, experience and aptitude for research.
  - It consists in the evaluation of the qualifications presented and in an interview concerning the discussion of the qualifications themselves with deepening of the topics of particular scientific importance related to the research program and the verification of the knowledge of the foreign language indicated in Annex A to this call.
- 2. The overall score is equal to 100 points, divided as follows:
  - up to a maximum of 75 points that can be assigned to the titles;
  - up to a maximum of 25 points that can be assigned to the interview.
- 3. The minimum score that candidates must have achieved in the evaluation of qualifications to be admitted to the interview is equal to 40/75 points.
- 4. In the evaluation of the scientific-professional curriculum, the following are taken into account:
  - any specialization diplomas and/or certificates of attendance at *post-graduate* specialization courses, obtained in Italy or abroad;
  - carrying out a documented experience for research activities at public and / or private subjects with contracts, fellowships or assignments, both in Italy and abroad;
  - scientific publications;
  - of any other securities.
- 5. The evaluation must be adequately justified. The results of the evaluation of the qualifications, as well as the list of candidates admitted to the interview, will be published on the University website <a href="https://www.unime.it/bandi-e-concorsi/assegnisti-di-ricerca-bandi-attivi">https://www.unime.it/bandi-e-concorsi/assegnisti-di-ricerca-bandi-attivi</a> before the date set for the interview.
  - The publication will be valid as a legal notification pursuant to the Digital Administration Code Legislative Decree no. 82 of 07/03/2005 supplemented and amended by Law 35/2012.
- 6. The interview will take place in a place accessible to the public. The competition work can also be carried out electronically, adopting means that allow the appropriate recognition of the subjects involved.







The interview will take place on Microsoft Teams system and the link will be available at the website where the list of admitted candidate will be published. The link will be furnished after the deadline of the application.

Candidates must have a valid identification document. Failure to attend the interview will be considered as a waiver of selection.

- 7. The interview concerns the discussion of the qualifications themselves with in-depth analysis of the topics of particular scientific importance related to the research program indicated in Annex A to this call, as well as the knowledge of the required foreign language.
- 8. At the end of each session dedicated to the interview, the Commission draws up the list of candidates examined, with an indication of the mark reported by each one, which will be posted on the register of the exam venue.
- 9. Once the tests have been completed, the Evaluation Commission, on the basis of the sum of the scores obtained, compiles a merit ranking, designating the candidate who, on the basis of the final ranking, was the winner. With equal merit and qualifications, the youngest candidate is preferred.
- 10. The Evaluation Committee shall transmit the minutes and related documentation to the Director of the Department for follow-up.
- 11. The results of the evaluation are formalized by decree of the Director of the Department and published on the University website <a href="https://www.unime.it/bandi-e-concorsi/assegnisti-diricerca-bandi-attivi">https://www.unime.it/bandi-e-concorsi/assegnisti-diricerca-bandi-attivi</a> -.

# Art. 6 Awarding of the research grant

- 1. The winner of the grant is required to accept the research grant within 7 days from the publication of the ranking on the University website, under penalty of forfeiture, unless impediment due to health reasons or serious reasons duly and promptly justified and proven.
- 2. In the event that the competition has gone deserted or has not given rise to any winner, the competition itself may be announced again, at the request of the Head of the Department and subject to the authorization of the Steering Committee of the Department, within 30 days from the conclusion of the work of the Evaluation Commission.
  - The announcement can be repeated only once and by directorial decree.
- 3. The annual amount of the research grant is determined at € 46.939,2 (or € 52.879,2 if living allowance is eligible) to be considered gross of the costs borne by the University. The total allowance is paid in deferred monthly instalments.
- 4. In tax matters, the provisions of art. 4 of Law no. 476 of 13 August 1984 and subsequent amendments and additions will be applied; In social security matters, the provisions of art. 2, paragraph 26 et seq. of Law no. 335 of 8 August 1995 and subsequent amendments will be applied.
- 5. With regard to the risks of accidents and civil liability, the University provides insurance coverage for the holder of the research grant.

# Art. 7 Nature and conclusion of the contract

1. The relationship between the winner of the procedure and the Department will be regulated by the conclusion of a private law contract.







- 2. The research fellow relationship is established following the stipulation with the MIFT Department of the University of Messina of a contract for the provision of intellectual work pursuant to articles 2222 and following of the Civil Code. The contract must be signed by the winner with a digital signature.
- 3. The contract does not constitute an employment relationship and does not give rise to rights regarding access to the roles of university staff.
- 4. The winner is required to start the research activity on the effective date indicated in the contract, with immediate start of the project activities on the basis of the indications of the Tutor and the Principal Investigator of the project.

# Art. 8 Rights and obligations of holders of research grants

- 1. The research activity, pursuant to art. 9 of the Regulations for the awarding of grants for the performance of research activities, must be carried out continuously, within the limits established by the research programs and the indications provided by the responsible teacher, who verifies the activity carried out, without constraints of subordination and predefined working hours.
- 2. The holder of the grant has the right to use, for the purpose of carrying out research activities, the facilities and equipment of the Department in which he carries out his activity. In the event that the activity must be carried out in external structures, it must be expressly authorized by the responsible teacher and communicated to the Department.
- 3. The tasks of the holder of the allowance, determined by the individual contract, are carried out under the direction of the responsible teacher, who verifies the activity carried out.
- 4. The holder of a research grant is required to:
  - submit to the Board of the Reference Structure, at least thirty days before the date of completion of the year of activity, an annual report on the activity carried out, subject to the approval of the responsible teacher and the minutes of the Board of the Reference Structure is promptly communicated to the Director of the Department;
  - in the last year of activity, it is required to present the final results of its activity in a public seminar or in the forms defined by the reference structure, which approves the scientific validity and communicates it to the Director of the Department.
- 5. The holder of a research grant may carry out:
  - a limited activity of self-employment, subject to written communication and agreement with
    the responsible teacher, provided that this activity does not involve conflict of interest and is
    declared compatible with the regular conduct of the research activity by the structure
    concerned. The assessment of compatibility and absence of conflict must be adequately
    justified;
  - orientation and tutoring activities and assistance to exams as an expert in the subject;
  - a period of in-depth study abroad, obtaining specific certification from the host institution, according to a program to be defined with the responsible teacher and approved by the reference structure, as well as with costs borne by the structure, without prejudice to the possibility of accessing targeted incentives;
  - the holder of the medical area grant can carry out care activities consistent with the research project, under the supervision of the scientific director and subject to the authorization of the







host hospital which will promptly notify the competent office of the central administration of the University.

Research fellows are required to comply with the provisions of Law no. 240/2010 in the text in force until 29.06.2022 and in the University Regulations for the awarding of grants for carrying out research activities. It is also required to comply with the regulations in force on industrial property, the D.P.R. n.62 / 2013 containing the "Regulation containing the Code of Conduct for public employees", the "Code of Conduct adopted by the University", as well as the provisions contained in the "Code of Ethics" of the University.

# Art. 9 Suspension, withdrawal and termination of the contract

- 1. The activity of the research fellow **is suspended** for maternity ( five months). It can also be **suspended** for serious illness or in cases of other prolonged absences, motivated and justified, which make it objectively impossible to carry out the activity, subject to the opinion of the responsible and deliberate teacher of the structure.
- 2. The suspension periods, with the exception of the mandatory maternity period, can be recovered at the end of the natural expiry of the contract, subject to agreement with the responsible teacher and in compliance with the limits imposed by the available funding. In the event of maternity, the contract is automatically extended, in accordance with current legislation, always in compliance with the limits imposed by the available financing.
- 3. A total period of justified absence not exceeding thirty working days per year does not constitute suspension, and consequently should not be recovered.
- 4. During the period of maternity leave, grant holders are entitled to the relative allowance paid by INPS in accordance with the provisions of current maternity regulations and the Decree of the Minister of Labour and Social Security of 12 July 2007 and, in the event of sick leave exceeding four days, they are entitled to use the daily sickness allowance within the limits established by Law no. 296 of 27 December 2006.
  - During the period of compulsory maternity leave, the allowance paid by INPS pursuant to art. Article 5 of the aforementioned Decree of 12 July 2007 is supplemented by the University up to the full amount of the research grant.
- 5. The parties may **withdraw** from the contract at any time. Reasons must be given for withdrawal. The holder of the research grant who intends to withdraw from the contract is required to promptly notify the reference structure.
- 6. The ranking list is also scrolled in the event of withdrawal of the winner from the contract provided that the remaining period is at least one year.
- 7. If the holder of the grant, without justified reason, does not regularly carry out the research activity, or the same is considered invalid by the Council of the reference structure or the holder of the grant is responsible for serious and repeated failures, at the request of the responsible teacher approved by the Council of the Structure, a procedure is initiated that can lead, following a resolution of the Council of the Structure, the termination of the contract pursuant to articles 1453 and following of the Civil Code. The serious and relevant breach pursuant to art. 1460 of the Civil Code, by the research fellow, constitutes cause for termination of the relationship.







- 8. The contract **is terminated by law**, without any obligation of notice, in the event of violation of the incompatibility regime. In the latter case, the forfeiture and termination of the contract are arranged by Decree of the Director of the Department.
- 9. The contract **is also terminated** in the event of violation of the obligations deriving from the Code of Conduct for public employees, referred to in Presidential Decree no. 62 of 16.04.2013, and the Code of Conduct adopted by the University.

# Art. 10 Intellectual property

- 1. Industrial property rights on the results achieved by the research fellow in the execution of activities carried out on behalf of the University, including but not limited to industrial inventions, models, drawings, plant varieties, as well as intellectual and industrial property rights deriving from the creation of software or databases ("Results"), are regulated by the Regulation for the regulation of the patenting activity at the University of Messina (D.R. n. 2773/2020) and by the national legislation in force, without prejudice to what is established in all the provisions relating to financing.
- 2. The research fellow has the right to publish the results of his research activity, unless the publication does not affect the right of the University to the protection of the Results. The research fellow is therefore obliged to communicate without delay the achievement of the results to the responsible teacher.

# Art. 11 Processing of personal data

- 1. The processing of personal data connected to this insolvency procedure is carried out by the University pursuant to European General Regulation no. 679/2016 for the protection of personal data and the Code regarding the protection of personal data Legislative Decree 196/2003 and subsequent amendments
- 2. The information is available in the privacy section of the University, <a href="http://www.unime.it/privacy">http://www.unime.it/privacy</a> and is an integral part of this announcement.

### Art. 12 Responsible for the procedure

1. Responsible for the procedure is Girolamo Barbera, responsible for the procedure at the Department MIFT is Girolamo Barbera. For information, interested parties can contact the responsible (telephone numbers: +39.0907678548; e-mail: gbarbera@unime.it).

Art. 13
Advertising







1. This decree will be published by posting on the Online Register of the University of Messina, it will also be made public electronically via the University website. (https://www.unime.it/bandi-e-concorsi/assegnisti-di-ricerca-bandi-attivi), the MUR website (http://bandi.miur.it/), the website of the project (https://www.ntnu.edu/topocom/) and the European Union website (http://ec.europa.eu/euraxess/).

### Art. 14 Final rules

- 1.Although not explicitly reported in this announcement, reference is made to the rules contained in art. 22 of Law no. 240/2010 in the text in force until 29.06.2022, in Presidential Decree no. 62/2013 as amended by Presidential Decree no. 81 of 13 June 2023, containing the "Regulation containing the Code of Conduct for public employees and the "Code of Conduct adopted by the University" as well as the provisions contained in the "Code of Ethics", in the Regulation for the awarding of grants for carrying out research activities (research grants) of the University of Messina (D.R. n.81 of 16 January 2020), in the Regulation for the regulation of the Patenting activity at the University of Messina (D.R. n. 2773/2020) and to the national legislation in force, as well as to the rules relating to the financing of the Project indicated in the introduction and to the other provisions in force.
- 2. The submission of the application for participation in the selections through the online procedure, pursuant to art. 3, implies the acceptance by the candidate of the rules contained in this announcement and in the aforementioned regulations.
- 3. Participation in the procedure implies, as acquired in advance, consent to the release of the documents submitted, in the event of a request by the other competitors, in accordance with the legislation on access to documents.

THE HEAD OF DEPARTMENT Prof. Domenico Majolino







#### ANNEX A

Title of the research program in Italian:

TOPOCOM- Solitoni topologici stabilizzati in materiali ferroici per applicazioni in calcolo nonconvenzionale

Title of the program project in English:

**TOPOCOM-** Topological solitons in ferroics for unconventional computing

Main field of research:
□ Agricultural Sciences □ Anthropology □ Architecture □ Arts □ Astronomy □ Life Sciences
□Chemistry □Communication Sciences □Computer Science □Criminology □Studies of
Civilizations   Demography   Economics   Educational Sciences   X Engineering   Environmental
Sciences   Health Sciences Etics   Natural Sciences Etics   Physical Sciences Etics   Social Science
Ethics Geography History X Information Sciences Legal Sciences Linguistic Sciences
□Literature X Mathematics □Medical Sciences □Neurosciences □Pharmacological Sciences
□Philosophy X Fisica □Political Sciences □Psychological Sciences □Religious Sciences
□Sociology □Technology □Other
CUN Area: 09

**Competition Sector:** 09/E1

**S.S.D: ING-IND/31** 

### Brief description of the research program in Italian (maximum 900 characters including spaces):

La principale attività del progetto sarà implementata nel programma di dottorato in Fisica sulla ricerca finanziata nell'ambito del programma HE MSCA DN "TOPOCOM" di ricerca leader nello studio delle fasi topologiche nella fisica della materia. Il dottorando svilupperà un codice di simulazione in C++/CUDA per la descrizione del comportamento dinamico di materiali ferroelettrici e ferromagnetici. Il risolutore di calcolo sarà inoltre usato per sviluppare concetti innovativi di calcolo non-convenzionale per applicazione nella prossima generazione di sistemi di intelligenza artificiale. Il progetto include periodi di tirocinio obbligatori presso altri partners della rete TOPOCOM.

# Brief description of the research program in English (maximum 900 characters including

The research activity will be implemented in the PhD program of Physics within the HE MSCA DN programme "TOPOCOM" (https://www.topocom.eu), which gathers some of the top European groups working on topological phases in condensed-matter systems. The Doctoral Candidate will develop a C++/CUDA native solver for the description of ferroelectric dynamics and ferromagnetic dynamics of devices at nanoscale. The solver will be also used to develop innovative and disruptive concepts in unconventional computing for application in the next generation of devices for Artificial Intelligence. The project will include some secondment periods.







Fondi: Grant Agreement number: 101119608 — TOPOCOM — HORIZON-MSCA-2022-DN-01 – progetto TOPOCOM

Scientific responsible: Prof. Giovanni Finocchio

Number of seats: 1

**Duration of the allowance: 36** Months **Renewable**: No

**Importo dell'assegno:** € **140.817,60** including social security charged to the Fellow and to the Institution according to the national laws in force.

If the candidate brings his family he is entitled to an additional living allowance equal to 19,217.60, as well.

**Location**: Department of Mathematical and Computer Sciences, Physical Sciences and Earth Sciences, University of Messina. PhD program in Physics.

### **Required access requirements:**

• Master's concerning the scientific disciplinary area of relevance obtained in Italy or the equivalent title obtained abroad (Physics, Mathematics, Computer Science, Engineering) and have not been awarded a doctoral degree

Foreign language required: English

### **Topics of the interview (in Italian):**

Modellizzazione dei materiali. Verifica delle competenze di informatica di base. Concetti basi di magnetismo e ferroelettricità.

### **Topics of the interview (in English):**

Material modeling. Evaluation of the basic notion of programming. Basic concepts of magnetism and ferroelectricity.

**International mobility is required:** Yes

Countries where the research can be conducted: Countries of the European Union

### **Recipients of the research grant:**

X researcher at the beginning of his career (0-4 years) (post-graduate)

- □ experienced researcher (4-10 years) (Post-Doc)
- $\Box$  highly experienced researcher (> 10 years)