







Updated on 11 May 2020 according to the Regulations for the awarding of research grants D.R. n.550 of 14 May 2020

#### **BANDO TOTALE CARICO**

#### THE DIRECTOR

- HAVING REGARD TO the Piano Nazionale di Ripresa e Resilienza PNRR;
- HAVING REGARD TO the Law n. 240 of 30 December 2010, art. 22 and subsequent amendments and additions;
- HAVING REGARD TO the Decree-Law n. 192 of 31 December 2014, converted into Law n. 11 of 27 February 2015;
- HAVING REGARD TO the Law n. 476 of 13 August 1984 and subsequent amendments:
- HAVING REGARD TO the Law n. 335 of 8 August 1995 and subsequent amendments;
- HAVING REGARD TO the Law n. 127 of 15 May 1997 and subsequent amendments;
- HAVING REGARD TO the D.P.R. n. 445 of 28 December 2000;
- HAVING REGARD TO the Law n. 241 of 7 August 1990 and subsequent amendments;
- HAVING REGARD TO the Statute of the University of Florence;
- HAVING REGARD TO the current University Regulations for the implementation of the Law n. 241/1990 and subsequent amendments and additions, regarding access to administrative documents;
- HAVING REGARD TO the Legislative Decree n. 196 of 30 June 2003, Code on the protection of personal data;
- HAVING REGARD TO the current University Regulations on the protection of personal data;
- IN VIEW of the current Code of Ethics of the University of Florence:
- HAVING REGARD TO the D.R. n. 550 of 14 May 2020 of enactment of the "Regulations for the awarding of research grants" pursuant to art. 22 of the law n. 240 of 30 December 2010;
- HAVING REGARD TO the Decree of the Minister of Education, University and Research n. 102 of 9 March 2011 which establishes the gross annual minimum amount of research grants;
- HAVING REGARD TO the provisions of the art. 47 of the Legislative Decree 31 May 2021 n. 77, converted into law 29 July 2021 n.108 relating to "Equal opportunities, generational and gender, in PNRR and PNC public contracts
- HAVING REGARD TO the resolutions of the Academic Senate and of the Board of Directors respectively of 29 and 30 April 2020 which establish the maximum annual gross amount of research grants;
- RECALLED the President's decree of 09/04/2020 Ref. n. 56053 (Directory n. 471/2020) containing the Guidelines for carrying out the online competition procedures for research grants and scholarships and research;
- HAVING REGARD to the authorization communication from the Reporting Management and Monitoring of Competitive Projects Unit of the Strategic Project Management Area, third mission and communication of the University of Florence adopted with Prot. n. 106413 of 10/05/2024;
- HAVING REGARD TO the resolution of the Council of the Department of Statistica, Informatica, Applicazioni 'G. Parenti' of 26/06/2024 which approves the opening of a









new selection for research grants financed by Department for an amount of € 25.900 that will be borne by the project funds in its entirety on the project: PRIN2022\_MARINO\_ANDREA - NextGRAAL: Next-generation algorithms for constrained GRAph visuALization, CUP: B53D23013130006 (25.900,00 €) COAN n. 75817 (21/06/2024);

- HAVING REGARD TO the transversal principles envisaged by the PNRR, such as, among other things, the principle of contribution to the climate and digital objective (so-called tagging), the principle of gender equality, the obligation to protect and enhance young people;
- CONSIDERING that pursuant to art. 7, paragraph 2, entitled "Eligibility Criteria" of the "Public notice for the presentation of intervention proposals for the creation of "Partnerships extended to universities, research centers, companies for the financing of basic research projects" within the National Recovery and Resilience Plan, Mission 4 "Education and research" Component 2 "From research to business" Investment1.3, financed by the European Union NextGenerationEU"- Notice no. 341/2022 of 15.03.2022, for the purposes of admissibility of the proposal, the latter must provide that at least 40% of the staff hired on a fixed-term basis must be female and at least 40% of the doctoral scholarships must be awarded to female researchers., the notices for the recruitment of new staff include appropriate clauses aimed at the inclusion, as further reward requirements of the offer, of criteria aimed at promoting female employment, pursuant to the provisions of article 47 "Equal opportunities, generational and gender, in the PNRR and PNC public contracts" of the Legislative Decree. 31 May 2021, n. 77 converted into law 29 July 2021, n. 108.
- VERIFIED by the Director of the Department the availability of sufficient funds in its budget to cover the amount granted by this Call for Applications;

#### **DECREES**

the issuing of the following:

Call for applications, evaluating qualifications and interview for n. 1 grant in the Area of Area Scientifica for carrying out research activities.

## Art.1 Object of the Call

A selection is called, based on qualifications and interview, for n. 1 grant for carrying out research activities to be performed as indicated below:









ACADEMIC DISCIPLINE	RESEARCH PROGRAMME	CURRICULAR REQUISITES AND ACADEMIC TITLES AS PER ART.3 OF THE REGULATIONS	ADDRESS OF THE UNIT OF AFFILIATION
INF/01	Title of the Research: Graphs and Transportation Networks. Scientific Supervisor: Prof. Andrea Marino.	<ul> <li>LM-91 Techniques and methods for the information society;</li> <li>LM-32 Computer Engineering;</li> <li>LM-18 Informatics;</li> <li>23/S Data processing;</li> <li>LM-40 Mathematics;</li> <li>LM-82 Statistical Sciences;</li> <li>Master's degree similar to those indicated</li> <li>Scientific-professional CV responding to the requisites</li> </ul>	DISIA Viale Morgagni, 59

The detailed research programme is an integral part of this call.

## Art.2 Awarding of the grant – Renewal

The selected candidate will be awarded a grant for the amount of € 20.996 per year, inclusive of the social security costs payable by the grant holder. The grant will be paid in deferred monthly instalments.

The grant is awarded for the duration of **12** *months* with effect from **01/10/2024** and may possibly be renewed to the same person for a maximum of **six** years overall, as regulated by art. 22 of Law 240/2010 and subsequent amendments, with the exception of the period in which the grant was received in connection with the research doctorate, within the maximum limit of the legal duration of the PhD programme.

For the purposes of calculating the maximum duration, the periods spent on maternity leave or sick leave are not counted according to the provisions of current legislation.

In the event of renunciation or revocation, the places made available can be assigned to candidates placed in a useful position in the ranking for a period of not less than 12 months and compatibly with the available resources.

The renewal, at the same conditions of the original contract, is decided by the Director of the Department upon request by the Scientific Supervisor. The renewal is subject to the positive evaluation of the activity carried out by the research manager, as well as to the actual budget availability.









#### Art.3

#### Requisites for admission to the selection

For participation in the selection, the following qualifications and curricular requirements are mandatory:

#### Requirements:

- LM-91 Techniques and methods for the information society;
- LM-32 Computer Engineering;
- LM-18 Informatics;
- 23/S Data processing;
- LM-40 Mathematics:
- LM-82 Statistical Sciences;

Master's degree similar to those indicated;

Scientific-professional CV responding to the requisites.

#### The requirements must be met by the deadline of the Call for Applications.

All academic qualifications obtained abroad (degree, doctorate and any other qualifications) must, as a rule, be previously recognized in Italy according to current legislation on the matter. The equivalence of foreign qualifications, if not yet officially recognised, will be evaluated exclusively for the purposes of the admission of the candidate to this selection by the Admissions Board at the time of assessment of academic titles, based on the appropriate documentation (art.4 para.4).

Candidates in possession of an academic qualification obtained abroad, which has not yet been declared equivalent by the Italian authorities, must send the official translation with the "dichiarazione di valore" of the foreign qualification by the competent Italian diplomatic or consular representations in the country of origin, according to the regulations in force on the subject, within thirty days from the decree approving the selection results and in any case within 30 days from the decree approving the selection results and in any case at the time of signing the contract.

In case the documents are not received within this period the candidate will be not be eligible to sign the contract.

#### Art.4

#### Submission of the application and the academic titles

The application for participation in the selection, drawn up in accordance with the facsimile set out in **Annex 1**, must be sent to the Director of the Department of Statistica, Informatica, Applicazioni 'G. Parenti' Viale Morgagni, 59 exclusively via electronic means, according to the following methods:

- a) by **certified email (PEC)** to the following address: **disia@pec.unifi.it**. The candidates in turn must have a certified PEC email as well.
- b) by email to the following address: disia@disia.unifi.it.

To fill in the application, it is necessary to use the "Online applications" section: <a href="https://stlabtest.dinfo.unifi.it/beta/akademia-candidature/">https://stlabtest.dinfo.unifi.it/beta/akademia-candidature/</a>









The generated application must be signed by the candidate and sent, according to one of the methods mentioned above, in PDF format together with a scan of a valid photo ID. Please note: ALL documents must be in PDF format.

The subject line of the email must contain the following: "Application for the grant as announcement D.D. n DA INDICARE of DA INDICARE"

The deadline for submitting the selection application is 22/08/2024 at hour 11:59 pm) under penalty of exclusion for late submissions.

The interview will be held on 05/09/2024 at 03:00 pm on-line by GoogleMeet.

The above information constitutes a formal and final convocation for the interview.

In order to be admitted to the interview all candidates must present a valid ID.

The interview will be **online** out in accordance with the "Guidelines for the conduct of online competition procedures for research grants and scholarships" (D.R. n. 471/2020 of 09/04/2020 Ref. N.56053).

In the application letter the candidate must indicate the exact denomination of the Call they wish to apply to, indicating the Area and the Research project as per art.1.

They must furthermore declare under their responsibility, as provided for in DPR n. 445/2000, the following:

- name and surname, tax identification number (codice fiscale), date and place of birth;
   citizenship;
- residence and the address of the domicile chosen for the purposes of the selection (specifying the area code and telephone number) as well as the email address for any communications relating to this notice;
- the degree required, the date, the university and the country where it was obtained;
- that they do not currently have any pending administrative or criminal proceedings and, in case of past criminal or civil convictions, list all charges in detail (the date of the judgment, the judicial authority and the type of judgment, the violated rules, the number of proceedings and the penalties reported);
- that they have been dismissed, released from previous employment with a public administration for persistent insufficient performance and that they have never been discharged from other state employment pursuant to art. 127 letter d) of the Consolidated Law 10 January 1957, n. 3, for having obtained the employment through the production of false documents or formally defective, or not to be prevented from public service following disciplinary dismissal;
- that they are not aware of being subjected to criminal proceedings, or to have ongoing criminal proceedings. In the latter case, indicate the offenses for which the criminal proceedings are underway, the Authority and the status of the proceedings;
- that they enjoy civil and political rights;
- that they are not part of the permanent staff of the universities and other bodies indicated in art. 22, paragraph 1, Law n. 240/2010;









- if they are holders of research grants relating to previous periods carried out pursuant to art. 22 of Law 240/2010;
- that they are aware of the bans on accumulation and incompatibilities provided for in art.12 of this announcement:
- that they will promptly communicate any change of residence or address.

## Art.5 Documents to be attached to the application

Candidates must attach to the application:

- scan of a valid ID;
- a scientific-professional CV in Italian or in English, using the European template. The CV must be signed and completed with all relevant documents and attachments;
   (Annex 5)
- the scientific publications and articles in pdf format;
- a self-certification relating to the academic qualifications held, both those required for participation in the selection and any further qualifications deemed useful for the assessment, with an indication of the institution that issued them and the date it was awarded (Annex 2);
- for qualifications obtained abroad, if already declared equivalent, must attach the relevant certification; otherwise, must attach the certificates related to academic qualifications obtained abroad with official translation in Italian;
- signed and dated list of all attached titles, awards and certificates and any other document mentioned with all necessary information to retrieve them (Annex 3);
- Declaration of acceptance of the online mode for the interview (Annex 6).

In order to allow the subsequent insertion of the data relating to the researcher contract in the MIUR database, the CINECA form (Annex 4) must be <u>completed in full and signed</u> <u>by the candidate</u>, the content of which must coincide with what is indicated in the application.

The data of the successful candidate will also merge into their individual profile inside the MIUR website <a href="https://loginmiur.cineca.it">https://loginmiur.cineca.it</a>, to which the grant holder will have access, once registered.

The Administration cannot be held responsible of the consequences deriving from incorrect indications by the candidate or from any technical/IT issues in submitting the application.

### Art.6 Exclusions

Candidates are excluded from participation in the selection when any of these situations occur:

- the application has been submitted after the deadline set out in art.4;
- the application has been submitted after the deadline set out in art. 4they have not attached the required self-declarations regarding the possession of the admission requirements, or that they have produced false or non-compliant declarations, certifications and/or documentation;

The following candidates are NOT ALLOWED under any circumstances to take part to the selection procedure those who have a relationship of kinship and affinity, up to and including the fourth degree, with academic staff belonging to the Department where they are asked to carry out the Research Project, or with the President, the General Manager or a member of the University's Board of Directors, as required by art. 18, paragraph 1 letter c)









of Law n. 240, and in accordance with art. 4, paragraph 2, letter c) of the current Code of Ethics of the University of Florence, or with any of the members of the Selection Board. The Administration may enforce these exclusion measures at any time in all cases of lack of the required prerequisites.

The Administration will carry out checks on the truthfulness of the content of the substitute declarations.

### Art.7 Composition of the Admissions Board

The Admissions Board, nominated following the deadline of the call with a decree from the Director of the Department of Statistica, Informatica, Applicazioni 'G. Parenti', published on the Official Register of the University, it will be composed of three members chosen from tenured professors and researchers belonging to the same scientific area in which the research will be carried out. The Board can be supplemented by a representative of the funding body, if applicable. In any case, the research manager whom the grant holder will collaborate with, will be a member of the Admissions Board.

### Art.8 Evaluation of qualifications and interview

The Admissions Board will evaluate, for the sole purpose of candidates' admission to the selection, the equivalence of qualifications obtained abroad that have not yet been recognized in Italy according to the legislation in force on the matter.

The Admissions Board will then carry out a comparative evaluation of the candidates by formulating an analytically motivated judgment and identifying the name of the successful candidate.

As part of the selection procedures for the reasons indicated in the introduction, in the event of equal merit between those suitable for each individual procedure, the person of the least represented gender among those who submitted the application will be called.

For the evaluation of the candidates, the Admissions Board will have 100 points, **60** of which to be attributed overall to the candidate's qualifications and scientific professional curriculum and the remaining **40** points to be reserved for the interview.

### The evaluation of qualifications will be carried out before the interview.

The Admissions Board will proceed first thing with the assignment of the overall scores to the evaluable items, the qualifications and the curriculum, as indicated below:

- educational qualifications, additional to the requirements for admission: up to a maximum of 20 points
- professional scientific curriculum: up to a maximum of 40 points

The Admissions Board establishes the following minimum score that candidates must achieve in the evaluation of qualifications in order to be admitted to the interview: **10** points

The Admissions Board establishes the following minimum score that candidates must achieve in the interview in order to be considered suitable: **20** points









The Admissions Board will not proceed with the evaluation of the qualifications, unless all the elements and data necessary for such evaluation are indicated.

As part of the interview, the Admissions Board will proceed to ascertain, among other aspects, the knowledge of the field subject of the call, the clarity of presentation and the suitability of the candidate to carry out the research called for.

The Admissions Board results will send a report with the final evaluation to the Director of the Department for approval.

## The results of the evaluation will be published on the University's Official Register and on the Department's own website www.disia.unifi.it

The results of the selection will be communicated personally to the selected candidate(s) by the Department. Any complaint against the approval decree must be filed to the Director of the Department within ten days from the date of publication, in accordance with art. 12 the current Regulations for the assignment of research grants.

#### Art.9 Insurance

Research fellows are insured by the University for Civil Liability against Third Parties and for Accidents starting from the beginning of the research activity without charges against them (information on the University website on the http page: <a href="http://www.unifi.it/vp-3514-schema-tipo-di-contratto-per-collaborazione-ad-attivita-di-ricerca.html#assicurazioni">http://www.unifi.it/vp-3514-schema-tipo-di-contratto-per-collaborazione-ad-attivita-di-ricerca.html#assicurazioni</a>).

# Art.10 Contract and required documents

The Department will contact the successful candidate in order to sign a contract regulating collaboration in the research activity, after checking the actual availability of the funds. To such contract must be attached a copy of the insurance policy as per previous article. The successful candidates must, at the time of signing the contract submit copies of the

following documents:

- a valid photo ID;
- tax identification number (codice fiscale);
- resident permit where it is indicated a reason consistent with the research grant (only for non-EU citizens).

Citizens of countries outside of the European Union must be in possession of one of the residence permits provided for by the current immigration legislation in order to sign the contract for research fellowship with the University of Florence. Therefore, it will not be possible to proceed with the stipulation of the contract if the winner is not in possession of a suitable residence permit. If this condition occurs, the aforementioned candidate will be declared lapsed and the contract will be offered to the next suitable candidate in the ranking.

The ascertainment of this condition will be made at the time of signing the contract. Furthermore, even if the loss of possession of the residence permit occurs after the contract has been signed, such condition will constitute cause for its termination.

In case the candidate holds a foreign title as one of the prerequisites, and then fails to obtain by the competent Italian diplomatic or consular representations in the country of origin, and









then submit within 30 days, the required legalisation and declaration of value of such academic title, he or she will be ineligible to sign the contract.

# Art.11 Intellectual property

The management of industrial and intellectual property rights deriving from research carried out by university staff is governed by art. 65 of the Industrial Property Code (Legislative Decree n. 30 of 2005 and subsequent amendments) and by the "Regulation for the management of industrial and intellectual property rights with reference to the research activities carried out by university staff" issued with D.R. n.82735 (526) of 08/05/2019, which provides that, in the case of bound research, i.e. funded in whole or in part by private entities, or carried out in the context of specific research projects funded by public entities other than University, the industrial property rights that may result belong to the University, which remains the owner of any rights deriving from inventions obtained with the contribution of its researchers, pursuant to art.3 of the aforementioned Regulations.

Pursuant to art.1 para. 3 of the Regulations, the grant holder, with the stipulation of the contract, declares to accept the application of the rules indicated therein.

#### Art.12

### Prohibition of cumulation – incompatibility

The grant cannot be combined with scholarships of any kind, except with those awarded by national or foreign institutions for the purpose of integrating training and research activities with stays abroad.

Research grants cannot be awarded to permanent staff of universities, institutions and public research and experimentation bodies, the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and Italian Space Agency (ASI), as well as of institutions whose scientific specialization diploma has been recognized as equivalent to the title of research doctor pursuant to art.74, fourth paragraph, of the decree of the President of the Republic 11 July 1980, n.382.

Employees serving in public administrations or private entities other than those specified in the paragraph above, with full-time, part-time or fixed term contract, are entitled to hold a research grant on the condition that they be placed on leave without pay for the duration of the research project or that their private employment contract is put on hold.

The awarding of the grant is not compatible with participation in degree programmes of any level including specialist or professional master courses, PhD with scholarship or medical specialization, in Italy or abroad.

The holder of the grant cannot be in a relationship of kinship and affinity up to the fourth degree included with any academic belonging to the Department where the research is carried out, or with the President, the General Manager or a member of the University's Board of Directors, as required by art.18, paragraph 1, letter c) of Law n.240/2010, and in accordance with art.4, paragraph 2, letter c) of the current Code of Ethics of the University of Florence as well as with any member of the Admissions Board as per art.6 of this Call.

The research grant holder can carry out self-employed work only after authorization by the Department Council, having heard the motivated opinion of the scientific director of the grant, after verifying that this activity is:

- a. compatible with the research activity set out in the grant;
- b. not prejudicial to the conduct of research activities;
- c. not in conflict of interest with the specific research activity carried out; also taking into account the reporting rules set forth by the funding body.









# Art.13 Suspension of the contract

The research activity must be suspended for maternity leave. In this case, the provisions of the decree of the Minister of Labour and Social Security 12 July 2007, published in the Official Journal n.247 of 23 October 2007 will apply.

The period of compulsory suspension for maternity will be recovered at the end of the natural expiry of the contract in accordance with the provisions of current legislation.

The research activity can be suspended for grave illness or for serious family reasons and also in this case, the suspension periods can be recovered at the end of the natural expiry of the contract, subject to agreement with the academic in charge and in compliance with the limits imposed by the funds available.

During the period of compulsory maternity leave, the allowance paid by INPS, or by another social security fund, is integrated up to the full amount of the grant with monies paid by the University

In case of maternity or any other type of leave, reference is made to art.22 paragraph 6 of Law n.240/2010

Concerning sick leave, the law that applies is n.296, art.1, paragraph 788 and subsequent amendments and integrations.

The suspension measure is ruled by a decree from the Director of the Department where the research is conducted.

## Art.14 Termination of the contract

If the researcher does not continue the activity foreseen by the research program without a justified reason or is responsible for serious or repeated shortcomings, at the motivated request of the Research Manager and with the resolution of the Council of the Department, the termination of the contract can be ordered, pursuant to art.1453 et seq. of the civil code. The termination measure is ruled by a decree from the Director of the Department where the research is conducted.

#### Art.15

#### Withdrawal by the research grant holder

The grant holder has the right to withdraw from the research programme, giving a notice of at least **15** (**fifteen**) days addressed to the Director of the Department and to the research project manager.

Failure to do so implies the withholding of the amount corresponding to the period of mandatory advance notice.

## Art.16 Attending PhD courses

The research grant holder can attend, as an extra and without the right to any scholarship, PhD courses, provided that he/she passes the required admission tests and, if applicable, pays any fee connected to the courses.

#### Art.17

#### Tax and social security provisions

The provisions of Art.4 of the Law n.476 of 13 August 1984 and subsequent amendments and additions, apply to research grants regarding tax matters. As far as social security is









concerned, the applicable law is n.335 of 8 August 1995, art.2, paragraphs 26 and following and subsequent amendments.

### Art.18 Personal data processing

Candidates are invited to read the "Information for the processing of personal data of interested parties to participate in personnel recruitment procedures or selection procedures for admission to courses with a limited number or for the awarding of research grants, scholarships, collaborative and/or teaching assignments" available at:

https://www.unifi.it/upload/sub/protezionedati/Informativa SELEZIONI.pdf

The application forms and documents produced by the candidates constitute "administrative documents" with respect to which, except in exceptional cases, the need for confidentiality must be excluded. These documents, once acquired by the selection procedure, are no longer considered to be within the personal sphere of the participants who, therefore, do not take on the role of counter parties, in any claim to access the documents of the procedure by another party. In any case, the provisions of the GDPR (EU Regulation 2016/679 of the European Parliament and of the Council of 27 April 2016 published on the OJEU of 04 May 2016), relating to the protection of individuals with regard to the processing of Personal Data and the movement of such data, will be abided to.

# Art.19 Procedure manager

The manager for this selection procedure is Dott.ssa Claudia Conti, address Viale Morgagni, 59 - 50134 - Firenze, ph. 055-2751500, e-mail disia@disia.unifi.it, Certified e-mail (pec) disia@pec.unifi.it

## Art. 20 Final provisions and publication

For all matters not provided for in this announcement, reference is made to the current legislation in force.

The notice will be posted in the University's Official online Register, on: <a href="https://www.unifi.it/vp-391-assegni-di-ricerca.html">https://www.unifi.it/vp-391-assegni-di-ricerca.html</a>, on the website of the Ministry of Education and Research (MIUR) and on the European Union's Euraxess website.

Florence,

THE DIRECTOR OF THE DEPARTMENT Prof.ssa Carla Rampichini









#### RESEARCH GRANT

Title: Graphs and Transportation Networks

Titolo: Grafi e Reti di Trasporto

#### DESCRIPTION OF THE RESEARCH ACTIVITY

**Description:** Research within the field of algorithm design and graph theory for the analysis of large real-world networks, with particular focus on transportation networks. Such networks can be effectively modeled using graphs, representing mobility and points of interest, while neglecting specific uninteresting aspects. Hence, discovering the most important points of interest (centrality), measuring the efficiency of the network (flow), making the network more robust (network design) can be translated into problems on graphs. Adding temporal constraints allows us to better model public transportation networks. For instance, one can use the so-called temporal graphs. There, connections are available only at prescribed times, in the same way as in public transportation systems buses and trains follow a time schedule. In this scenario, paths are valid only if the connections are time consistent, meaning that each connection in the path must arrive before the departure of the next one. The research aims to rethink those classical notions of graph theory with some additional temporal constraint on paths. The design of new graph algorithms will possibly be integrated with implementations and practical experiments on real world transportation networks.

Descrizione: Ricerca nell'ambito teorico e algoritmico per l'analisi di reti del mondo reale di grandi dimensioni, con particolare riferimento alle reti di trasporto. Tali reti possono essere modellate mediante l'ausilio di grafi, rappresentando le vie di comunicazione tra i punti di interesse e astraendo da aspetti specifici particolari. In tale contesto scoprire i punti di interesse più importanti (centrality), misurare l'efficienza della viabilità (flusso), irrobustire la rete (network design) possono essere tradotti in problemi su grafi. L'aggiunta di ulteriori vincoli temporali sugli archi permette una migliore modellizzazione delle reti di trasporto pubblico. Ad esempio, questo può realizzarsi mediante i cosiddetti grafi temporali. Nei grafi temporali le connessioni sono disponibili solo in tempi prestabiliti, nello stesso modo in cui le connessioni di un sistema di trasporto pubblico sono disponibili a orari fissati. In questo contesto i cammini sono validi solo se il tempo di partenza di ogni connessione è compatibile con il tempo di arrivo nel luogo della coincidenza. La ricerca si propone un ripensamento delle classiche nozioni di teoria dei grafi per tenere conto dei vincoli temporali sui cammini. Il design di algoritmi su grafi sarà possibilmente accompagnato da un'implementazione e sperimentazione pratica su grafi di trasporto reali.

f.to Scientific Supervisor Prof. Andrea Marino.

#### TEMPLATE OF APPLICATION FORM

To the Director of the Department of Statistica, Informatica, Applicazioni 'G. Parenti' Viale Morgagni, 59 50134 Firenze

I, the undersigned, request to participate in the selection referred to in the announcement issued by the Director's Decree n. ........ of ....... for the award of n. 1 research grant to join the Research Programme: Graphs and Transportation Networks of the Area Area Scientifica at the Department of Statistica, Informatica, Applicazioni 'G. Parenti'.

Aware that in accordance with articles 75 and 76 of 28/12/00 n.445, in the case of false declarations, false information in the documents or use of false documents, I will incur the penal sanctions referred to and will immediately lose the right to the research grant

#### I THEREFORE DECLARE

Pursuant to art.19, 46 and 47 of the D.P.R. n.445/2000:
Family name First name
Place of birth (town)(province/state and country
Permanent address (town).  (province/state and country.  street name, n  Zip code.
Domicile during the research project duration, if different from permanent address: (town) (province/state and country street name, n
cell. ph  Tax ID number (codice fiscale)e-mail
Nationality

### I also declare the following

	I hold the foreign university title (specify if undergraduate, post-grad, etc),					
	in (specify academic field)					
	of Final mark Final mark					
	I hold an Italian post-graduate degree obtained prior to 1999 in					
	University of Graduation date Final					
	mark					
	I <b>hold</b> an Italian post-graduate degree according to D.M. 509/99 Class/S					
	inat the University					
	of Final mark Final mark					
	I hold an Italian post-graduate degree according to D.M. 270/04 Class LM					
	inat the University					
	of Final mark Final mark					
	And not to exceed with this research grant the limit of 6 years total established in Article 6, paragraph 2a					
	of Law n. 11/2015;					
	I am enrolled in the PhD programme in					
	(cycle) at the University of					
	Date of commencement Ending on					
	( ) with grant ( ) without grant					
	I hold a PhD title in					
	of					
	PhD thesis will be held before the date of the evaluation of the titles by the Admissions Board (specify					
	the expected date of discussion of the thesis)					
	I hold a Specialisation title in					
	Graduation date					
	I hold a research grant (indicate for each grant the university of affiliation and related period)					
	from/ to/ at					
	from/ to/ at					
	from/ to/ at					
	from// to/at					
	And not to exceed with this research grant the limit of 6 years total established in Article 6, paragraph 2a					
	of Law n. 11/2015;					
	I have never received a research grant;					
	I hold the following further academic and/or professional qualifications (indicate all the data necessary					
	for verification by the structure):					
	for verification by the structure).					
	I do not currently have any pending administrative, criminal or civil proceedings as per current legislation;					
	OR					
	I have had past criminal convictions (list all charges with the date of the judgment, the judicial authority					
_	and the type of judgment, the violated rules, the number of proceedings and the penalties reported);					
	The office of jungment, the vicinitarians, and manifest of procedurings and the permanent repetition,					
	that I have never been dismissed or released from previous employment with a public administration for					
_	persistent insufficient performance and that I have never been discharged from other state employment					
	pursuant to art.127 letter d) of the Consolidated Law n.3/1957, for having obtained the employment					
	through the production of false documents or formally defective; and that I have not been prevented from					
	public service following disciplinary dismissal;					
	promote service tenoving anothernary anomicous,					
	that I am not aware of being subjected to criminal proceedings;					
_	OR					

ш	that I have ongoing criminal proceedings. In such case, indicate the offenses for which the criminal proceedings are underway, the Authority and the status of the proceedings;				
	that I enjoy full civil and political rights; that I am not part of the permanent staff of the universities and other bodies indicated in art.22, paragraph 1, Law n.240/2010; that I am aware of the bans on accumulation and incompatibilities provided for in art.12 of this announcement; that I will communicate any change of residence or contact details.				
sul gra col	I, the undersigned, declare that I am aware of the information for the processing of personal data of subjects willing to participate in selection procedures for staff recruitment, research grant/scholarship awarding or participation in restricted access courses and teaching or collaboration contracts. Such information can be consulted at this page: <a href="https://www.unifi.it/upload/sub/protezionedati/Informativa_SELEZIONI.pdf">https://www.unifi.it/upload/sub/protezionedati/Informativa_SELEZIONI.pdf</a>				
Da	te,Signature				

Attach a copy of your ID

### Declaration of affidavit (Dichiarazione sostitutiva di atto di notorietà) Given pursuant to art.19 and 47 of DPR n.445 of 28/12/2000

I, the undersigned	
	Date of Birth
Aware that pursuant to art.75 and 76 of DPR	N.445 of 28/12/00, in the event of false declarations or
	al sanctions referred to and will immediately become
ineligible for any assignment of the research	•
I	DECLARE
	and listed below are true copies of the originals in my
possession:	
1)	
2)	
3)	
10)	
Date,	
	Signature

### **LIST OF ATTACHMENTS**

I, the undersigned, (family name and first name	·)
Place of birth (town)	
(province/state and country	
Date of birth	
Permanent address (town)	
` '	
<u>*</u>	Zip code
	•
Domicile during the research project duration, i	f different from permanent address:
(town)	<u></u>
	Zip code
	•
cell. ph	••••
-	
I hereby <b>ATTACH</b> to the ap	plication the following documents:
1)	
2)	
3)	
4)	
,	
,	
,	
Date,	
	Signature

### **CINECA form for Research Grant Contracts**

(the data provided below must be identical to those submitted in the call for application)

### PERSONAL and CONTACT DETAILS

Tax Identification Number (Codice Fiscale) (please write clearly and in block letters)

Family name	First name	
M/FDate of birth (dd/mm/yyyy)	//Place	e of birth (town, province,
country)	Nationali	
E-MAIL	CELL.	РН
ADDRESSES		
PERMANENT ADDRESS:		
(town)		
(province/state and country)		
(street name)	n	ZIP CODE
DOMICILE: (only if different from permanent add	lress)	
(town)		
(province/state and country)		
(street name)		
FISCAL DOMICILE: (only if different from pe		
(town)		
(province/state and country)(street name)		
(street name)		Zn code
ACADEMIC TITLES:		
() Foreign title		
( ) T( !! T		
	0/00 Class /S (	
( ) Italian Laurea Specialistica DM 509		
( ) Italian Laurea Magistrale DM 270/		
obtained at the University of		
Graduation date		
( ) Specialisation title in		date
A.Y/University of _		
( ) PhD in		

Graduation date	at the University of:		
Cycle	Date commencement	Date ending	<u> </u>
months of duration	on		
Grant NO()	YES ( ) from//_	to/n. month	S
CONTRACT DATA			
Unit of affiliation: Stat	istica, Informatica, Applicaz	zioni 'G. Parenti'	
Public call data: Direc	tor's Decree n. of		
<b>Duration (months):</b> 12	Contract's beginning date	e (dd/mm/yyyy): 01/10/2024	
Research Supervisor/N	Manager: Prof. Andrea Mar	ino.	
Title of the research p	roject: Graphs and Transpor	tation Networks	
Academic discipline: I	NF/01		
Further disciplines (if	applicable)		
<b>D</b>			
Date,		Signature	

### FORMATO EUROPEO PER IL CURRICULUM VITAE



#### **INFORMAZIONI PERSONALI**

Nome

 $\hbox{[COGNOME, Nome, e, se pertinente, altri nomi]} \\$ 

Indirizzo

[ Numero civico, strada o piazza, codice postale, città, paese ]

Telefono

Fax

E-mail

Nazionalità

Data di nascita

[Giorno, mese, anno]

#### **ESPERIENZA LAVORATIVA**

• Date (da - a)

[ Iniziare con le informazioni più recenti ed elencare separatamente ciascun impiego pertinente ricoperto. ]

- Nome e indirizzo del datore di
  - lavoro
  - Tipo di azienda o settore
    - Tipo di impiego
- Principali mansioni e responsabilità

#### **ISTRUZIONE E FORMAZIONE**

• Date (da – a)

[ Iniziare con le informazioni più recenti ed elencare separatamente ciascun corso pertinente frequentato con successo. ]

- Nome e tipo di istituto di istruzione o formazione
  - Principali materie / abilità professionali oggetto dello studio
    - · Qualifica conseguita
    - Livello nella classificazione nazionale (se pertinente)

#### CAPACITÀ E COMPETENZE PERSONALI

Acquisite nel corso della vita e della carriera ma non necessariamente riconosciute da certificati e diplomi ufficiali.

MADRELINGUA [In

[Indicare la madrelingua]

**ALTRE LINGUA** 

[Indicare la lingua]

Capacità di lettura [ Indicare il livello: eccellente, buono, elementare. ]
 Capacità di scrittura [ Indicare il livello: eccellente, buono, elementare. ]

• Capacità di espressione orale [Indicare il livello: eccellente, buono, elementare.]

CAPACITÀ E COMPETENZE RELAZIONALI

Vivere e lavorare con altre persone, in ambiente multiculturale, occupando posti in cui la comunicazione è importante e in situazioni in cui è essenziale lavorare in squadra (ad es. cultura e sport), ecc.

[Descrivere tali competenze e indicare dove sono state acquisite.]

CAPACITÀ E COMPETENZE ORGANIZZATIVE

Ad es. coordinamento e amministrazione di persone, progetti, bilanci; sul posto di lavoro, in attività di volontariato (ad es. cultura e sport), a casa, ecc. [ Descrivere tali competenze e indicare dove sono state acquisite. ]

CAPACITÀ E COMPETENZE

TECNICHE

Con computer, attrezzature specifiche, macchinari, ecc.

[ Descrivere tali competenze e indicare dove sono state acquisite. ]

CAPACITÀ E COMPETENZE

**ARTISTICHE** 

Musica, scrittura, disegno ecc.

[ Descrivere tali competenze e indicare dove sono state acquisite. ]

ALTRE CAPACITÀ E COMPETENZE

Competenze non precedentemente indicate.

[Descrivere tali competenze e indicare dove sono state acquisite.]

PATENTE O PATENTI

**ULTERIORI INFORMAZIONI** 

[Inserire qui ogni altra informazione pertinente, ad esempio persone di riferimento, referenze ecc.]

### ALLEGATI [Se del caso, enumerare gli allegati al CV.]

n e 4 -( b	nateria qualora rilasci dichiara sibisca atti contenenti dati no 45/2000); decade dai benefici eventualm ase della dichiarazione no	viste dal codice penale e dalle leggi speciali in zioni mendaci, formi o faccia uso di atti falsi od n più rispondenti a verità (articolo 76 del D.P.R. ente conseguenti al provvedimento emanato sulla in veritiera qualora dal controllo effettuato non veridicità del contenuto della dichiarazione
L	ì, data	Firma,
а		_ autorizzo/a il trattamento dei miei dati personali 30 Giugno 2003 n. 196 e del GDPR (Regolamento
ı	ì data	Firma

Declaration of accepta assignment of a resear out the online public of 09/04/2020 Ref. n.5605.	ch grant as per Dec competition proced	ree n of ( ures for research gran	art.2 Guid	elines for c	arrying
I, the undersigned					
Tax ID number					
Place of birth (country)			(		)
Date	of	birth		/	_/
Permanent address					
DECLARE					
<ul> <li>that I will not use</li> <li>that I guarantee t interview;</li> <li>I acknowledge an</li> </ul>	the absence of any pend accept that the address	procedure; erson in the room that coministration will have not be connection for both the	responsibi	lity for IT to	echnical
Date:					
Place:					
Signatura	of	the		co	ndidate

("firma digitale" or handwritten, in full and legible. In case of handwritten signature, a copy of the applicant's ID must also be attached"firma digitale" or handwritten, in full and legible. In case of handwritten signature, a copy of the applicant's ID must also be attached)