GIVEN Law 240/2010, art. 18, DL 19/2012 GIVEN the Regulations governing the institution of research grants issued with RD no. 1362020 dated 05/02/2020 GIVEN the resolution Department of Mathematics dated 06/07/2021 concerning the activation of no. 1 research grant GIVEN the available funds aimed at financing the grant "Residui Progetto UE 'MANET' – Prof.ssa Giovanna Citti

The Head of the Department of Mathematics

invites applications for no. 1 research grant for a period of 12 months on the topic of:

Title: Qualisinear parabolic PDE in step 2 groups Tutor: GIOVANNA CITTI Duration: 12 months Maximum term: 01/11/2021 Subject Group: MAT/05 – Mathematics Analysis

For anything not provided for in this Competition, please see the Regulations governing research grants and the relative applicable laws.

Scope of the activities funded by the research grant:

Scope of the project is to study the internal regularity for solution of subriemannian p-Laplacian type equations. For this type of problems, there exists only a first result of Capogna, Citti, Zhong, in the Heinsenberg group, which we will extend to operators represented in terms of Hormander type vector fields of step 2. The researcher will perform a long visit abroad to a partner of the GHAIA project.

Please, see the reasearch project attached with the Call.

Amount

The amount of the grant is \notin 14.000,00 and is subject to the taxes and social security contributions provided for by law. The amount disbursed is deemed as covering any and all costs related to conducting the research activities envisaged by the project.

The accident insurance premium will be deducted from the first instalment of the grant valid at the time of announcing the competition.

Application procedures

Applications may be submitted as follows:

3. By Italian certified electronic mail (PEC) to the address <u>mat.dipartimento@pec.unibo.it</u>, indicating the following in the subject line of the email: Bando borsa di ricerca post-laurea "Qualisinear parabolic PDE in step

2 groups", by and no later than **23/08/2021** at **12:00 am** (Italian time). The date and time of receipt of the PEC will serve as proof of compliance with the deadline. Send the application duly completed and signed and any other documentation required in .pdf format, together with a scanned copy of a valid identity document.

4. By electronic mail (PEC) to the address <u>mat.direzione@unibo.it</u>, indicating the following in the subject line of the email: Bando borsa di ricerca post-laurea "Qualisinear parabolic PDE in step 2 groups", by and no later than 23/08/2021, at 12:00 am (Italian time). The date and time of receipt of the email will serve as proof of compliance with the deadline. Send the application duly completed and signed and any other documentation required in .pdf format, together with a scanned copy of a valid identity document.

Applications sent after the established deadlines or that do not contain the correct information as specified above will not be considered.

Requirements

- Degree in Mathematics or a degree in Mathematics obtained under the previous system existing prior to Ministerial Decree 509/99, as amended, or equivalent qualification obtained at a foreign university the suitability of which has been ascertained by the Selection Committee;
- to have not yet turned 39 years of age as at the deadline date of the competition;
- to not be in receipt of another study grant at this University in accordance with these Regulations.

Participation in the competition for the award of the research grants governed by these Regulations is not open to anyone who is related to (up to the fourth degree) a permanently employed teacher or researcher of the Structure involved in deciding on the award or the Structure in which the research activities will be conducted, or with the Rector, the Director General or a member of the University's Board of Governors.

The requirements must be met by the deadline established for this competitive selection procedure.

Candidates are admitted conditionally; if they fail to meet the aforementioned requirements, they may be excluded at any time, including following the selection procedure. In this case, a reasoned provision will be issued and communicated to the interested party.

Preferential qualifications

PhD in Mathematics or equivalent

Incompatibilities

The grants cannot be combined:

- with Research Grants and other research grants awarded for any reason, except those awarded by national and foreign institutions for the purposes of incorporating, through visits abroad, the specific activities envisaged in the programme of work to be carried out by the grant holder.
- with any fixed-term or permanent contract of employment, unless the grant holder is granted unpaid leave by his/her employer.

The grant holder is required to declare, under his/her own responsibility, that in his/her case, there is no incompatibility or combination of grants, and to promptly communicate any change in this circumstance.

The grant holder may perform freelance work, provided he/she informs the grant issuer beforehand and that said work is declared by the grant issuer as compatible with the research activities, that there is no conflict of interest with the specific research activity carried out by the grant holder and that it is not detrimental to the University in relation to the activity carried out.

The study grant for postgraduate research activities does not in any way establish an employment contract and does not give rise to any rights in relation to access to University positions.

How to apply

Candidates must submit:

- a. the application form, signed and dated
- b. a CV in Europass format, signed and dated
- c. a copy of both sides and all the relevant pages of a valid identity document (ID card, driving licence or passport)
- d. self-certification, issued in accordance with Presidential Decree 445/2000 with regard to their possession of the qualifications to be assessed, drafted in accordance with the attached template (Annex **B**). Candidates who have gained qualifications abroad must attach a translation into Italian of the foreign qualification, accompanied by self-certification attesting to its fidelity to the original. Foreign degrees may be declared admissible by the Selection Committee solely purposes participating for the of in the selection. Successful candidates who have gained degrees in a country outside of the European Union must send the Structure the official translation along with a Declaration of Value of the foreign degree issued by the relevant Italian diplomatic or consular official in their country of origin. It must be sent in the same manner as that provided for submitting the application, in accordance with the laws in force, within 30 days of the notification of the outcome of the competition, as formalised through the decree approving the proceedings. The research grant will be withdrawn in the event that the documents are not received by the Structure by said deadline.
- e. declaration in lieu of an affidavit in accordance with Presidential Decree 445/2000, drafted in accordance with the attached template (Annex C)
- f. any other document, qualification or publication that may help the application
- g. a signed and dated list on unstamped paper of the documents and certificates submitted with the application.

Selection procedure and assessment method

Candidates will be selected by an Examination Board appointed pursuant to art. 7 of the Regulations the activation of research for grants. The selection procedure will entail an assessment of the qualifications and curriculum vitae submitted by the candidates, based on which a score will be allocated, and an interview aimed at ascertaining the attitude of the candidates in conducting the research which the is be for grant to awarded. Before starting the assessment, the Examination Board will establish the total points available to be allocated which, in any case, may not exceed 100. The points be allocated follows: will as a) Curriculum vitae and qualifications, up to a maximum of 50 points b) Interview, up to a maximum of 50 points

Having completed the assessment of qualifications and curriculum vitae, the results of which will be communicated directly to the candidates, the Board will proceed with the interviews in order to establish the attitude of the candidates in conducting the research for which the grant is to be awarded.

The face-to-face interview will be held on **Tuesday, September 14, 2021, time: 09:00** (Bologna - Italian Time) at: Room 'Seminario II' - DIPARTIMENTO DI MATEMATICA, Piazza di Porta San Donato 5, Bologna (ITALIA).

In the event of a change in the methods, place and date of the interview, a communication will be sent to the candidates.

In light of the current circumstances, if they wish, candidates can request that the interview be held remotely, by sending their request via e-mail to: <u>mat.direzione@unibo.it</u> within Friday, September 10, 2021 at 12:00 am (Italian time).

The interview can also be arranged remotely by the Department. In this case, the candidates will be duly notified.

Based on the points allocated, candidates will be ranked and the winner identified by the Examination Board. In the event of a tie, preference will be given to the youngest candidate.

Award of the grant

Having received the documentation related to the selection, the Head of the Structure approves it and issues the relative provision. The name and identification code of the winner of the research grant and the ranking list of suitable candidates will be communicated directly to the interested parties by the deadline November 1, 2021.

The methods for accepting and managing the research fellowship can be carried out remotely.

The winner must sign the grant acceptance statement by the deadline established in the provision issued by the Head of the relative Department or Structure. Signing this statement indicates acceptance without reservation of the competition terms and conditions and the University regulations. Failure to accept by the established deadline entails the automatic forfeiture of the grant pursuant to art. 8 of the Regulations governing the institution of research grants for postgraduate research activities. By signing the statement, the winner also declares, under his/her own responsibility, that he/she is not subject to any of the prohibitions or incompatibilities contemplated by the competition and by the Regulations governing the institution of research grants at the University of Bologna.

In the event that the winner renounces the grant or does not accept by the established deadline, or of early termination of the grant, it will be offered to the next candidate on the ranking list. In such case, the order of the final list of suitable candidates ranked according to merit must be followed, in accordance with the provisions of the Regulations governing the institution of research grants for postgraduate research activities (art. 7).

Rights and obligations of grant holders

The grant holder is required to carry out the research activities for which the grant has been awarded, adhering to the learning programme prepared by the tutor and working under the supervision of the latter. The provisions of article 9 of the Regulations governing the institution of research grants for postgraduate research activities apply.

Procedure Supervisor:

In accordance with the provisions of art. 5 of Law no. 241 dated 07/08/1990, as amended, the administrative procedure supervisor of this competitive selection procedure is the Dott. Angela Concetta De Cesare

Processing of personal data

Pursuant to art. 13 of the General Data Protection Regulation (EU) 2016/679 of the European Parliament and the Council of 27 April 2016), candidates are advised that the personal data provided by them during the selection procedure or obtained for that purpose by the Alma Mater Studiorum - University of Bologna, is processed solely for the purpose of conducting the competition and by persons responsible for the competition proceedings and by the Examination Board at the Alma Mater Studiorum - University of Bologna. The data are processed using also computerised procedures, in the manner and to the extent required in order to achieve the aforementioned purposes, including the possible communication with third parties. The provision of such data is necessary in order to verify the candidates' qualifications and that they meet the participation requirements. Failure to provide this data may hinder this verification. Candidates have the rights referred to in articles 15 et seq. of the aforementioned Regulation (EU) 2016/679, in particular the right to access their data, to request and obtain the rectification, erasure or the restriction on processing of the data, as well as the right to object to the processing of their data. They may exercise these rights by emailing the Alma Mater Studiorum - University of Bologna at privacy@unibo.it.

Data subjects who believe that their personal data have been processed in violation of the requirements of the Regulation may file a complaint with the Italian Data Protection Authority, as provided for by art. 77 of the above Regulation, or seek an effective iudicial remedy (art. 79 of the Regulation). The Data Controller is the Alma Mater Studiorum – University of Bologna (registered office: via Zamboni 33, 40126 - Bologna, Italy; e-mail: privacy@unibo.it; PEC scriviunibo@pec.unibo.it). (certified email): The contact details for the Data Protection Officer are: registered office: via Zamboni 33, 40126 - Bologna, Italy; e-mail: dpo@unibo.it; PEC (certified email): scriviunibo@pec.unibo.it.

Further information can be found in the relative privacy policy available on the website <u>www.unibo.it/privacy</u>

On [date]

The Head of the Department Prof. Fabrizio Caselli (*digitally signed*)