









Public notice of competition for the Doctoral Thesis Award "Tullio Levi-Civita" Second edition











Foreword

The **Department of Mathematics** "Tullio Levi-Civita" of the University of Padua and the "Associazione Amici dell'Università di Padova", with the support of Corvallis srl and the collaboration of "Associazione Alumni dell'Università di Padova", announce a competition for the assignment of an award named after Tullio Levi-Civita (Padua 1873 - Rome 1941), the great Paduan mathematician who was professor at the University of Padua and Rome "La Sapienza", famous for his fundamental research in differential geometry, mathematical physics and other important fields of pure and applied mathematics.

Tullio Levi-Civita was born in Padua on March 29, 1873 to a Jewish family. His father Giacomo, a former "Garibaldino", was mayor of the city of Padua from 1904 to 1910 and later a senator of the Kingdom of Italy. In 1890 Tullio enrolled at the University of Padua, where in 1894 he graduated in Mathematics with a thesis on "Absolute Invariants", which was supervised by Gregorio Ricci Curbastro. In 1897 he won the chair of Rational Mechanics at the University of Padova, where he remained until 1918. In January 1919 he moved to the University of Rome. Tullio Levi-Civita was a prestigious scientist, very renowned internationally, extraordinarily prolific on a wide range of mathematical topics, from Analytical Mechanics to Differential Geometry and Global Analysis. Perhaps his most famous contribution remains the invention of the so-called "parallel transport".

Very well-known is the correspondence of 1915 with Albert Einstein, who learned from the Italian mathematician an error in a first version of his equations of General Relativity. It was the same Levi-Civita, then, to provide the crucial suggestion to make up for the mistake. Between the two, however, a deep esteem was established that lasted a lifetime and that Einstein reaffirmed in various circumstances.

With the Royal Decree "On the Defense of the Race" of 1938, which provided for the expulsion from the school and the university of Jewish students and teachers, Tullio Levi-Civita was removed from all academic positions. While some colleagues affected by the same measure moved abroad, Levi-Civita refused various offers from the best research centers in the world and decided to stay in Italy, to follow, in private, his students and collaborators. But the wrong suffered left a deep mark, and his physical condition worsened rapidly, until the death of heartbreak, which occurred on December 29, 1941.

The award aims to support, also financially, the research of young scholars who distinguish themselves for a PhD thesis that covers the topics described in the section "Requirements".

1. Requirements

The prize is reserved for young scholars who are less than 32 years old at the publication date of the present document, and who have defended a doctoral thesis within the terms specified below. The thesis should focus on one or more topics concerning the following areas: *Analytical Mechanics, Differential Geometry, Variational Problems.* The thesis, possibly of interdisciplinary character, should make an autonomous and original contribution to the above topics, with international scientific and / or applied impacts.

Participants must have defended the doctoral thesis in the twelve months preceding the date of publication of this notice (and in any case by the date of expiry of it).











2. Modality and terms of submission of the application

The application for participation in the competition, addressed to the Director of the Department of Mathematics "Tullio Levi-Civita" and written in plain paper according to the outline attached to this announcement, must be delivered no later than **11:59 pm** on **27 March 2022**, with one of the following methods:

- by certified e-mail (PEC) to the following address: dipartimento.math@pec.unipd.it:
 - accompanied by a digital signature affixed to it and on all the documents in which the handwritten signature is to be affixed in a traditional setting;
 - by sending a copy of the application signed in autograph, together with a copy of the subscriber's identity document; all documents in which the handwritten signature is to be affixed in a traditional environment must be similarly transmitted in a signed copy. Copies of these documents must be scanned;

For the electronic transmission of the documentation, static and not directly modifiable formats must be used, without macro-instructions and executable codes, preferably pdf/A.

The receipt of the delivery of the documentation will be sent automatically to the candidate by the PEC manager therefore it will not be necessary to call any university office

- directly from the candidate or person in charge: to the Department of Mathematics "Tullio Levi-Civita" Via Trieste, 63 35121 Padua III Floor Scala A Torre Archimede (opening hours: Monday to Friday 10.00 12.30) or to the Service Right to study and tutoring in via del Portello, n. 31, (opening hours: Monday and Friday 10.00 12.30, Tuesday 10 12.30 and 15.00 16.30, Thursday 10.00 15.00);
- by mail to the Department of Mathematics "Tullio Levi-Civita" Via Trieste, 63 35121 Padova.

Failure to comply with the deadline indicated for the submission of the application for participation in the competition will result in exclusion from the selection.

For the compliance with the deadline indicated above, the postmark will not be considered valid.

The candidate must specify on the envelope or on the subject of the e-mail the wording "Notice of competition for the award of the study award named after Tullio Levi-Civita – 2^{nd} edition".

In the application form, in plain paper, the candidate must declare under her-his own responsibility:

- surname and name, place and date of birth, citizenship, tax code, residence and address chosen for the purposes of the competition, specifying the postcode, telephone number and email address;
- to have defended in the twelve months preceding the date of publication of this announcement (and in any case by expiry date of it) a doctoral thesis on the topics specified in the section 'Requirements' of this announcement, at an Italian institution, indicating its name;
- of not having reached the age of 32 on the date of publication of the announcement;
- to commit to promptly communicate any change of residence or address indicated in the application form;
- to be aware of all the rules contained in the competition announcement.











The application must be accompanied by the following documentation:

- curriculum vitae of the candidate, with particular reference to the continuity of the research, titles, including research doctorate, specializations, publications and prizes obtained;
- description (not exceeding 6000 characters excluding spaces) of the Doctoral Thesis, of the personal contribution given by the candidate, of the relative results obtained, and of any possible scientific and applicative consequences;
- copy of the doctoral thesis;
- copy of a valid personal identity document.

If the application is sent by registered mail with acknowledgment of receipt, the works must be presented on paper and electronically (CD, "Pen Drive"), accompanied by a declaration from the undersigned stating that the contents of the aforementioned IT support coincide.

If candidates meet the requirements for enrollment in the Associazione Alumni dell'Università di Padova, at the same time as submitting the application, they are requested to register their profile for free on the Association's portal using the online form at the link https://www.alumniunipd.it/member-register/

3. Award amount and method of delivery

The gross amount of the premium is \leq 5,000.00 for the first classified and \leq 1.000,00 for the second classified.

The above amounts are gross of duties charged to the University (I.R.A.P.) and will be paid by the Department of Mathematics "Tullio Levi-Civita".

4. Award assignment procedure

The prize will be awarded based on the unquestionable judgment expressed by a committee composed of at least 3 members representing the Department of Mathematics "Tullio Levi-Civita" of the University of Padua, the Associazione Amici dell'Università di Padova and Corvallis srl.

The committee has the right to contact additional experts to ascertain the degree of quality, innovation and the specific contribution of the candidates.

The *ex ante* evaluation criteria are summarized below:

- candidate's curriculum (continuity of research, titles, publications and awards achieved, projects completed);
- original contribution of the candidate to the research carried out in the Doctoral Thesis;
- degree of innovation and impact of the activities carried out in the national and international scientific panorama.

The Commission reserves the right not to award the prize, if at its sole discretion no candidate will be deemed worthy.

The winner will be notified of the award by e-mail, to the address indicated in the application for participation in the announcement. The outcome of the selection will also be published on the website of the Department of Mathematics, at https://www.math.unipd.it/en/news/calls-











selections-and-prizes/ and on the University of Padua website, at the address: https://www.unipd.it/en/scholarships.

The winner will be required to participate in the ceremony for the awarding of the prize which will be subsequently paid in a single instalment by the Department of Mathematics "Tullio Levi-Civita".

5. Head of the administrative procedure

Pursuant to art. 4 of Law 241 of 7 August 1990 (New Rules on Administrative Procedure and Right of Access to Administrative Documents) Dr. Cinzia Clemente Administrative Secretary of the Department of Mathematics "Tullio Levi-Civita" is appointed Head of the administrative procedure.

Candidates have the right to exercise the right of access to the documents of the competition proceeding according to the procedures established by the Decree of the President of the Republic of 12 April 2006 n. 184 (Regulations governing access to administrative documents in compliance with Chapter V of Law 241/90).

The parties undertake to comply with the provisions of the General Data Protection Regulation [GDPR (UE) 2016/679] regarding the protection of personal data that may be acquired and / or used for carrying out the activities described above.

6. General Information

Associazione Amici dell'Università di Padova, established in 1989, promotes the relationship between the University of Padua and the productive economic world and supports research and teaching programs, scientific and cultural meetings, prizes and other awards in favor of deserving students and young scholars.

Associazione Alumni dell'Università di Padova, since 2015, brings together all the graduates, the Ph.D., the master's graduates and the specialization schools of the University of Padua in a community to which they can have free access and equal consideration in the name of the founding values of the University, values one can continue to be inspired by in professional and private life and of which they can be prestigious witnesses in the world.

Corvallis is one of the first service companies in Italy. Thanks to its 30 years of activity, it offers: consulting, software integration, products, application services and outsourcing, according to a business model aimed at supporting and growing customers. Corvallis is always looking for the improvement of efficiency and quality of services offered, it is a dynamic and innovative company that combines well with a project of support dedicated to the future of bright young people who stand out for innovation and preparation. The company wants to become an ambassador of the importance of innovation and of giving confidence to new generations.

The present competition announcement with the application form will be available on the website:

https://www.math.unipd.it/en/news/calls-selections-and-prizes/

https://www.unipd.it/en/scholarships

www.amiciunipd.it











www.alumniunipd.it

www.corvallis.it

Further information and detailed rules can be requested directly from the Secretariat of the Department of Mathematics "Tullio-Levi Civita" by e-mail to either the following e-mail address premilm@math.unipd.it reporting on the subject line the words "Request information competition for the Award of the "Tullio Levi-Civita" Doctoral Thesis" or to the Right to Study and Tutoring Service, via del Portello, n. 31 (Tel. 049 / 8273131- Fax 049 / 8275030- e-mail: service.studenti@unipd.it).

Attachments to this announcement:

• Annex A - Application form

Padua, 27 | U 2021

The Director of the Department

Prof. Bruno Chiarellotto