

**Call for Doctoral positions at the International Doctoral Programme in
"Mathematics" - 31st Cycle**

N.B. Please note that only the Italian version of the present call issued with Rector's Decree n. 320 of 21.05.2015 is legally binding; the English version is provided for information only

THE RECTOR

Given Law no. 210 of the 3rd of July, 1998, and in particular, art. 4, as amended by article 19, section 1, of law no. 240 of 30 December 2010;
Given Ministerial Decree no. 45 of the 08th February, 2013, regarding the general criteria to be followed by individual universities in the organization of doctoral studies;
Given the Decree by the Prime Minister of the 9th of April, 2001, and subsequent amendments, on the general criteria for uniform treatment regarding the right to higher education;
Given the Statute of the University of Trento issued with Rector's Decree no. 167 of the 23rd of April, 2012, in particular art. 28;
Given the University Regulations for Doctoral Programmes, issued with Rector's Decree no. 383 of the 04th of July, 2013 and subsequent amendments;
Given the proposal made by the Department of Mathematics;
Given the report of the internal Evaluation Committee of the 12th of December 2013 concerning the requisites of appropriateness proposed by the Doctoral Programmes;
Given the decision by the Academic Senate of the 29 January 2014;
Considering that, with Decree protocol n. 687 of 20 August 2014, the Ministry granted, with effect from the cycle activated in A.Y. 2015-2016, the accreditation of the Doctoral Programme in Mathematics;
Given the decision by the Academic Senate of 26 November 2014 concerning the availability of scholarships for each PhD programme of the University of Trento;
Given the decision by the Academic Senate of 25 February 2015 regarding the setting of the final rankings and the definition of the procedure to assign scholarships reserved to specific topics and the introduction of a new type of subjects for which additional seats may be reserved;
Considering the operative instructions on the 2015-2016 AY PhD Programmes' accreditation process, announced with Ministry Note on March 13, 2015;
In consideration of the resolution of the Academic Senate on March 25, 2015, according to which the University of Trento, taking into account the time required for international recruitment, has decided not to delay issuing the calls and their relative selection procedures;

DECREES

Art. 1 – SUBJECT OF THE CALL

The University of Trento opens the call for position for the 31st cycle (Academic Year 2014/2015) of the PhD Programme in Mathematics at the University of Trento jointly with the University of Verona.

Positions: n. 9

Scholarships: n. 9

Supernumerary positions: n. 2 (see art. 9)

Deadline for application: July 29, 2015, hrs. 4:00 PM Italian time (GMT +2)

The scholarships are funded as follows:

- n. 5 scholarships: financed by the University of Trento;
- n. 3 scholarships: financed by the University of Verona;
- n. 1 scholarship: financed by the The Microsoft Research – University of Trento Centre for Computational and Systems Biology (COSBI), and reserved for the topic:
A. Language-based stochastic simulation of biological systems. The candidate will use graphical, programming and mathematical languages to model the dynamics of biological systems parametrized with experimental biological data and will work in team in larger projects devoted to elucidate the behavior of relevant pathways involved in neurodegenerative and metabolic disorders.

Director of the PhD Programme: Prof. Francesco Serra Cassano – Tel. 0461 281673 - E-mail: phd.maths@unitn.it

Website of the Programme: <http://web.unitn.it/en/drmath>

Website of the admission procedure: <http://www.unitn.it/en/ateneo/1956/announcement-of-selection>

Duration: three years

Official Language: Italian and English

Start of the Academic Year: November 1, 2015

Disciplines:

- INF/01 COMPUTER SCIENCE
- MAT/01 MATHEMATICAL LOGIC
- MAT/02 ALGEBRA
- MAT/03 GEOMETRY
- MAT/05 MATHEMATICAL ANALYSIS
- MAT/06 PROBABILITY AND STATISTICS
- MAT/07 MATHEMATICS PHYSICS
- MAT/08 NUMERICAL ANALYSIS
- MAT/09 OPERATIONAL RESEARCH
- SECS/01 STATISTICS
- SECS-S/06 MATHEMATICAL METHODS OF ECONOMY, FINANCE AND ACTUARIAL SCIENCES

The positions with scholarships or other forms of financial support, including apprenticeship contracts and research grants, may be increased following the publication of this call and by the assessment of qualifications through additional funds from other universities, public research institutions and/or qualified private enterprises. For this reason, the increase in scholarships may in parallel change the total number of the positions available. Any extra available positions will be posted solely on the website:

<http://www.unitn.it/en/ateneo/1956/announcement-of-selection>

Art. 2 – ADMISSION REQUIREMENTS

Applications for doctoral positions are accepted from candidates, regardless of gender, age and nationality, who hold an Italian “Laurea Magistrale”, according to the Ministerial Decree no. 270 of the 22nd of October 2004 and subsequent amendments, a university degree of the previous regulations in force, or “Diploma accademico di secondo livello” issued by Italian Higher Education Institutions of Music, Arts and Performance, or an equivalent degree obtained abroad (Master’s degree) recognized as equivalent by the Admissions Committee for the sole purpose of access to the present selection . Any degree in a scientific area will be given preferential status.

Applications are also accepted from students expecting to obtain their degree **by October 31, 2015**; in such case applicants must attach the following documents:

- a certificate of enrolment with a list of the examinations successfully passed and marks obtained in each examination (if this document is not in English, the candidate must provide, in the same file, a translation of the same duly undersigned);
- a statement by the thesis supervisor declaring that the student will complete his/her degree by October 31, 2015.

For EU citizens, and only for titles that will be achieved at a public institution of the member countries of the European Union, the two above-mentioned documents may be substituted by a self-declaration, as required by art. 46 of Presidential Decree no. 445 of 28.12.2000 and subsequent amendments, with exams taken, the corresponding grade and the expected date for the graduation examination, prepared **using the Annex A**.

Admission to the Doctoral Programme for successful candidates who have not graduated yet will be “conditional” and the applicant will have to submit to Science & Technology PhD Office (via email to: phd.office-st@unitn.it) **by November 6, 2015**, on penalty of exclusion, the degree certificate (EU citizens may deliver a self-declaration using Annex A only for qualifications that have been acquired at a public institution of

a member country of the European Union according to Presidential Decree no. 445 of 28.12.2000 and subsequent amendments).

Art. 3 – UNIVERSITY QUALIFICATIONS AWARDED ABROAD

Foreign Academic degrees (Master's degree) must be comparable to the "Laurea Magistrale" in terms of duration and level¹. Based on this principle, the Admissions Committee will decide on their eligibility.

Applicants with a foreign qualification that has not been officially recognised as equivalent² to an Italian degree (Laurea Magistrale/Specialistica/Vecchio Ordinamento) will be considered as requesting equivalence in their application. In this case, it is necessary to submit the following documents:

- the degree certificate with examinations taken and corresponding grades (transcript). EU citizens may deliver, only for qualifications that have been acquired at a public institution of a member country of the European Union, a self-declaration according to Article 46 of the Presidential Decree No. 445 of 28.12.2000 and subsequent amendments, by using Annex A;
- the translation into English, if in a different language, of the degree certificate with examinations taken and corresponding grades undersigned by the applicant, on his/her own responsibility. The purpose of the English translation is solely that of allowing the Admissions Committee to evaluate the applicant's eligibility for the selection process;
- any other official document concerning the foreign degree which can be considered useful for its evaluation (Diploma Supplement³ or Dichiarazione di valore in loco⁴ etc.)

The eligibility of foreign academic degrees is assessed by the Admissions Committee, following the rules in force or the international treaties on academic degrees' recognition. The ID candidates list whose academic degree has been considered not eligible for admission to the selection by the Admissions Committee will be made available at: <http://www.unitn.it/en/ateneo/1956/announcement-of-selection>. It is therefore recommended that candidates keep the ID of the application provided by the system at the end of the procedure for the application online. The publication of the list on the website is to be considered as official notification.

Admitted candidates holding an academic degree obtained outside Italy must submit to the Science & Technology PhD Office (email phd.office-st@unitn.it) no later than January 11, 2016:

- the Diploma Supplement in English (for qualifications awarded at an institution of a country of the European Higher Education Area) according to the model developed by the European Commission, by the European Council and by the UNESCO/CEPES.
- the "Dichiarazione di Valore in loco" (for qualifications that have been acquired in other countries) along with their degree certificate with its corresponding examinations and grades, all these translated and legally certified by the Italian diplomatic delegations in the country where the degree was issued. The Dichiarazione di Valore should certify that the university degree is valid and enables candidates to enrol on a PhD course in the country where it was obtained (third level of higher education according to the Bologna Process);
- or, if the above mentioned Dichiarazione di Valore is not ready within the deadline, a document proving that the request of release has already been submitted to the diplomatic representative; in such case the candidate must submit the Dichiarazione di Valore at the earliest convenience;

Lack of such documents may result in the exclusion from the Doctoral Programme.

Art. 4 - DOCTORAL PROGRAMME

The PhD Programme in Mathematics lasts three years and is articulated into four curricula:

a. Research field in Pure Mathematics

The research fields deals with one or more of the following scientific areas:

- Calculus of Variations: analysis in metric spaces, geometric measure theory, variational convergences (Gamma-convergence), optimal transport.

¹Italian: <http://www.studiare-in-italia.it/study/new-degrees.html>, English: <http://www.study-in-italy.it/study/new-degrees.html>

²For further information visit <http://www.cimea.it/default.aspx?IDC=113>

³The Diploma Supplement accompanies a higher education diploma providing improvement in international "transparency" and promotion of the academic and professional qualifications obtained (diploma, degrees, certificates, etc.) The Diploma Supplement must be **issued** by the same institution that issued the qualification. Further information at: http://ec.europa.eu/education/tools/diploma-supplement_en.htm

⁴Further information about DV at <http://www.cimea.it/default.aspx?IDC=176>

- Nonlinear Partial Differential Equations (PDE): free boundary problems, hysteresis models, asymptotic behaviour and homogenization of PDE, variational and topological methods, Ginzburg-Landau and Schrödinger nonlinear equations.
- Analytic and Algebraic Geometry:
 - Algebraic curves and moduli spaces.
 - General surfaces and moduli spaces
 - Higher-dimensional varieties: Mori theory, Fano varieties
 - Real algebraic geometry, complex and hypercomplex analysis.
- Mathematical Physics: foundational, analytic, and geometric aspects of quantum and relativistic theories and of analytical mechanics; applications to control theory.
- Dynamical Systems and Control Theory: existence, multiplicity, stability of periodic solutions of differential equations, Lagrangian and Hamiltonian systems; differential games, optimal control problems, viscosity solutions of Hamilton- Jacobi equations; optimization of hybrid systems.
- Stochastic Processes: stochastic partial differential equations.
- Mathematical Logic and Theoretical Computer Science: applications of non standard techniques (à la A. Robinson) in functional analysis, development of non classic logics, programming language theory, type systems, static analysis, proof theory and constructive mathematics, Hilbert's programme for abstract mathematics.
- Lie theory, group theory, representations of algebras, homological algebra, computational algebra

b. **Research field in Mathematical Modelling and Scientific Computing (MAMOSC)**

The research field deals with the following scientific areas :

- Numerical Methods for Partial Differential Equations: modelling of electromagnetism and (classical and quantum) fluid dynamics problems, approximation methods based on finite element, boundary elements, finite differences or finite volumes.
- Stochastic Processes: integro-differential stochastic equations (and/or stochastic PDE) modelling several physical, biological, financial phenomena.
- Numerical approximation/interpolation of multivariate functions: efficient methods and applications
- Discrete mathematics: operations research modelling, graph theory, combinatorial optimization and applications in data science and computational biology
- Optimal control, optimization: applications to decisions science, imaging, cultural heritage

c. **Research field "Algebraic Coding Theory and Cryptography: algebraic and geometric methods"**

This research field aims at fostering research in the mathematical methods underpinning algebraic coding theory and cryptography, in particular:

- Algebraic methods: linear algebra, commutative algebra, computational algebra, Groebner bases, numerical fields, group theory;
- Geometric methods: algebraic geometry over finite fields, elliptic curves.

The research problems range from purely theoretical classifications to industrial applications, the latter complemented by internships within leading companies.

d. **Research field "Mathematical and Computational Biology"**

The research field aims at fostering research in the broad field of applications of mathematical and computational models in biology.

The methods that will be studied range from the theory of ordinary and partial differential equations, and with delay, or stochastic processes, to computational statistics, bioinformatics, formal methods for describing complex systems.

Several areas of biology are involved: from epidemiology and ecology, to networks with applications to molecular pharmacology systemic and nutrigenomics.

The thesis project will consist of the modeling of a biological problem, with the aid of mathematical, statistical, computational and computer methods. Other research centers in the province of Trento (CoSBI, FBK, FEM) or elsewhere could be involved in the project.

Art. 5 – APPLICATION

Application for the Doctoral Programme is made by completing the online process that involves two phases:

1) registry on the University's website at <http://www.unitn.it/en/account> by entering the information requested. If the registration has been correctly submitted, within a maximum of 2 working days the applicant will receive a

username and password by email, these being credentials needed in order to utilize the UNITN's online services;

2) compilation of the application⁵, complete with the requested attachments in electronic format, available at <http://www.unitn.it/en/apply/dott>

The application shall be subject to the payment of an application fee - non-refundable - amounting to € 15 to be paid by credit card, according to the instructions given in the appropriate section of the Application online.

The application must be completed and submitted by 4.00 PM Italian time of July 29, 2015. Please, make sure you have received the email notifying the correct closure of the Application online. The University refuses any liability for all those applications online not properly completed, closed and submitted by candidates.

Candidates are advised not to wait until the last days prior to the deadline before submitting their applications. The University assumes no liability for any malfunctions due to technical problems and/or the overloading of the communication line and/or systems application or for the loss of documents due to incorrect addressing by the candidate or late notification of change to the address indicated in the application, nor for any errors attributable to acts of third parties, to unforeseeable circumstances or force majeure.

The online application is considered to be a self-declaration of personal data and qualifications declared with full legal effect.

It is the sole responsibility of the applicant to submit a correct and complete application. Applications not submitted using the online procedure as specified in this article, incomplete applications and applications lacking of the mandatory attachments, including the payment of the application fee, shall not be considered valid and therefore automatically discarded.

The ID candidates list whose applications are found incomplete, and are consequently excluded from the selection, will be published at <http://www.unitn.it/en/ateneo/1956/announcement-of-selection>. The publication on the website is to all intents and purposes valid as notification of exclusion from this selection.

All applicants are admitted to the selection procedure conditionally upon ascertainment that they fulfill the admission requirements.

The University of Trento has the right to verify the documents delivered pursuant to articles 71 et seq. of the Presidential Decree no. 445 of December 28, 2000. The University can at any time, even after enrollment and upon justified reasons, decide the exclusion of candidates lacking the requirements specified in the present call.

According to Italian Law No. 104/92, Article 20 and to Italian Law No. 68/99, Article 16 (1), applicants with special needs or affected by learning disabilities are expected to indicate explicitly in their application whether they require special assistance or extra time during the interview. Under Legislative Decree 196/03, all information will be kept confidential.

During the filling out of the application online, candidates must choose one of the four research areas in the section "Research areas of the PhD Programme". This choice is not binding.

MANDATORY ATTACHMENTS (failure to upload one or more mandatory attachments results in exclusion from the selection)

1) Identifying document (ID):

- A copy of the applicant's current **identity card** (only EU citizens) or **passport**, in particular of the pages reporting photograph, personal data, number, place and date of issue and expiry date. No other identity document will be accepted;

2) academic certificates:

- **Applicants with an Italian qualification** (Laurea Magistrale/Specialistica/Vecchio ordinamento or Dottorato): a self-declaration, in accordance with Presidential Decree art. 46 no. 445 of 28.12.2000 and subsequent amendments, declaring the possession of a degree (art.2 of this Call), "*Classe di Laurea*"⁶, award date, issuing University, final grade, examinations taken and grades obtained (by using Annex A);
- **Applicants with a foreign qualification** (Master's degree or PhD): copy of the degree certificate with examinations taken and grades obtained or equivalent certification, under art. 3 of this Call. If the qualification has not been officially recognised as equivalent to an Italian degree (Laurea Magistrale/Specialistica/Vecchio ordinamento)⁷ the

⁵The candidate can choose either Italian or English to fill in the application.

⁶See at <http://hubmiur.pubblica.istruzione.it/web/universita/offerta-formativa/classi-di-laurea-magistrale>

⁷Further information at <http://www.cimea.it/default.aspx?IDC=113> - <http://www.cimea.it/default.aspx?IDC=134>

applicant must also submit a translation into English (if in a different language other than Italian or English) of the academic certificate with the examinations taken and grades obtained. Such translation must be undersigned by the applicant, under his/her own responsibility, in order to enable the Admissions Committee to declare the degree's equivalence for the sole purpose of admission to the selection procedure. In order to facilitate the evaluation of the equivalence, it is highly recommended that students with foreign qualifications submit a Diploma Supplement⁸ or the Dichiarazione di Valore in Loco, if available;

• **Applicants who expect to be awarded their degree by October 31, 2015, and are therefore “conditionally” admitted to the selection:**

- a certificate of enrolment with a list of the exams successfully passed and marks obtained in each examination; if this document is not in English, the candidate must provide, in the same file, a translation of the same duly undersigned;
- a statement by the thesis supervisor declaring that the student will obtain the degree **by October 31, 2015**.

For EU citizens the two above-mentioned documents may be substituted by a self-declaration, as required by art. 46 of Presidential Decree n. 445 of 28.12.2000 and subsequent amendments, with examinations taken, the corresponding grade and the expected date of the graduation examination, prepared using the Annex A only for qualifications that will be acquired at a public institution of a member country of the European Union.

- 3) a short **thesis summary** in English (maximum 10000 characters, spaces included) structured as follows: motivations of the thesis and final results;
- 4) **curriculum vitae** in English, preferably according to the Europass model:
<http://europass.cedefop.europa.eu/en/documents/curriculum-vitae>;
- 5) **statement of purpose in English** (max 3.000 characters, including spaces), motivating the applicant's research interest in Mathematics.

OPTIONAL ATTACHMENTS:

- copy of scientific publications, if any;
- any certifications attesting the knowledge of the English language. It should be noted that, at the end of the first year, it is strongly recommended that the student achieves at least a certificate of English language level **B2** or equivalent (if not already owned). This certification will be required for a student to be able to attend, at no additional cost, technical English language courses organized by the University of Trento;
- any additional documents which may be useful for the assessment of qualifications (awards, scholarships, post-graduate research activity, etc.);
- a maximum of 2 reference letters¹¹⁹ in English or Italian by referees, experts in the research fields of the Doctoral Programme from Universities or National/ International Research Institutions.

Once the section of the application relative to the referees has been completed and saved by the candidate, the system automatically sends, within 24 hours, a notification email to the referees containing the instructions and modes of transmission. Letters have to be issued on the base of a model sent directly to referees, and have to be uploaded on the website from them.

It is strongly recommended that applicants verify with their Referees that they have uploaded the Academic Reference Letters no later than August 3, 2015.

Only documents in English or Italian will be taken into consideration for the selection by the Admissions Committee.

The University will accept any additional documents to the submitted application if sent by email to

⁸The Diploma Supplement accompanies a higher education diploma, providing an improvement in international “transparency” and a promotion of the academic and professional qualifications obtained (diploma, degrees, certificates, etc.). The Diploma Supplement must be issued by the same institution that issued the qualification. Further information at: http://ec.europa.eu/education/lifelong-learning-policy/ds_en.htm

¹¹¹ A lack of reference letters does not constitute cause for exclusion from the selection procedure.

ateneo@unitn.it (Subject: "Application ID - Candidate's Surname and Name - Doctoral Course in "Mathematics" – 31st cycle - Supplement to application") **within July 29, 2015, hrs. 4:00 PM Italian time (GMT +2)**. Additional documents submitted by different means will be disregarded.

Art. 6 – SELECTION

The selection is based on:

- **assessment of qualifications**, according to previous art. 5, on the basis of criteria decided by the Admissions Committee in advance;
- an **oral examination** assessing the candidate's knowledge, his/her aptitude for scientific research and motivations.

The Admissions Committee can assign each candidate a total score of 100 points as follows:

- 50 for the assessment of qualifications;
- 50 for the oral examination.

Candidates who will gain a minimum score of **30/50** for the assessment of qualifications will be admitted to the oral examination.

After the assessment of qualifications, the list of the candidates admitted to the oral examination will be published at webpage <http://www.unitn.it/en/ateneo/1956/announcement-of-selection>.

Instructions pertaining to the date, time and location of the oral examination will be published at least 20 days before they take place on the following webpage:

<http://www.unitn.it/en/ateneo/1956/announcement-of-selection>.

Candidates who wish to be eligible for the additional reserved scholarships must make an explicit request to the Examination Committee before the oral examination at the time of identification. Competences on the specific subject of the reserved scholarship/s will be assessed during the interviews of interested applicants. Applicants must show a valid document for identification in order to be admitted to the oral examination.

The oral examination is passed with a minimum score of **30/50**.

Candidates who achieve an overall score equal to or above **60/100** will be eligible.

Applicants **residing or domiciled abroad, or otherwise unable to participate to the interview in person due to justifiable reasons**, may ask the Admissions Committee at the time of filling the application online, to conduct the oral examination by video-conference. In the case of admission to the oral examination, the candidate must send an e-mail to phd.maths@unitn.it, within 4 days from the date of publication of the outcome of the assessment of qualifications, specifying the address of a Research Institute, University, Italian Embassy or Italian Consulate where the interview will take place together with the name of an officer who can identify him/her before the interview. To do this the applicant will have to use the form available at:

<http://www.unitn.it/en/ateneo/1956/announcement-of-selection>

The Admissions Committee will authorize the above mentioned procedure after a technical check: the interested candidates will be contacted by the Secretariat of the Doctoral School in order to ensure the proper functioning. In order to deal with the above mentioned technical check interested candidates are invited to check their email boxes after the deadline of the present announcement.

The Committee shall verify that all the regularity requirements are fulfilled during the examination (verifying the candidate's identity and the accuracy of the examination).

Notice: The results of the selection - interim and final - will be posted on the website with the ID of the application. It is therefore recommended that candidates keep the ID number so to check their results.

Art. 7 – ADMISSIONS COMMITTEE AND RANKING

The Admissions Committee is appointed by the Rector upon advice of the Doctoral Committee. It is composed of at least three members chosen among Italian and foreign professors and researchers, who are experts in the scientific areas of the Doctorate. The Committee may also include up to two experts, who may be foreign, from public and private research institutes.

At the end of the selection procedure the Admissions Committee will draw up the ranking of candidates based on the scores obtained. Candidates who achieve an overall score equal to or above 60/100 will be eligible.

Positions will be assigned following the order of each ranking. Scholarships will be assigned following the order in the ranking;

1. the eligibility of the candidate for reserved scholarships.
2. the eligibility of the candidate for reserved scholarships.

Please note that reserved scholarships are assigned to the discretion of the Admissions Committee. The non-allocation of scholarships on reserved topics will result in the reduction of the positions listed in art. 1.

The final ranking of the candidates will be posted on the website:

<http://www.unitn.it/en/ateneo/1956/announcement-of-selection>

Notification is considered as delivered through the announcement of the short-list.

Successful applicants will not receive personal communication of their results.

Art. 8 - ADMISSION TO THE DOCTORAL PROGRAMME AND ACCEPTANCE

Applicants will be admitted to the Doctoral Programme according to their place in the final ranking list until all available places have been filled. Should two candidates obtain the same score: as regards the awarding of the scholarship, the candidates' economic situations shall be the deciding factor, in accordance with the criteria established by the Law of 9 April 2001 and subsequent amendments and integrations; when neither candidate has applied for a scholarship, the younger of the two candidates will be selected.

If a successful applicant withdraws before the beginning of the course (November 1, 2015), the next applicant on the short-list will be offered the place. The latter must submit his/her acceptance of the position within 4 days starting from the day after the communication from the Science & Technology PhD Office.

If a successful applicant withdraws or is excluded after the beginning of the courses and during the first quarter of the first year, the Doctoral School Committee may decide to fill the vacancy with the next applicant on the list. This communication will only be sent via email to the address indicated in the online application, so applicants are asked to check their email in order to see the possible takeover.

If a successful applicant withdraws or is excluded after the beginning of the courses and during the first quarter of the first year, the Doctoral School Committee may decide to fill the vacancy with the next applicant on the reference list.

Notice: Please note that it is not possible to remain in the Programme in case of renouncement to a reserved scholarship.

According to art. 20, paragraph 3 of the University Regulations for Doctoral Programmes, further candidates - up to **two** more than the total announced places - may be admitted without scholarship by the University, after passing the selection procedure and according to the ranking list, if they fall within one of the following categories:

- a) shortlisted non-EU candidates who are granted scholarships by other entities;
- b) shortlisted candidates from countries which have specific inter-governmental agreements with Italy, and with which an ad-hoc agreement with the University is then made, without the University of Trento being required to assume any financial obligations;
- c) be a research fellow at the date of the beginning of the PhD programme according to Italian Law 240/2010 and be researching a subject relevant to the PhD Research Programme; such relevance to be determined by the PhD Programme Committee;
- d) Italian civil servants or under Italian public law regime. Admission is subject to passing the selection procedure and placement on leave under Article 2 of the Law of 13 August 1984 no. 476 and subsequent amendments.

Public employees who have already obtained the title of Doctor of Philosophy, or civil servants who have been enrolled on the doctorate for at least one academic year, benefiting from leave regardless of the research scientific area, are not entitled to special leave with or without a scholarship.

Admitted applicants must send the acceptance of the position using the form downloadable at <http://www.unitn.it/en/ateneo/1928/enrollment-1-2-3-year> the following address:

Università degli Studi di Trento
PhD Office – Science and Technology
Via Sommarive, 14 – 38123 Trento (ITALIA)
Email phd.office-st@unitn.it

within 5 days starting from the next day of the publication of the final rankings on the website <http://www.unitn.it/en/ateneo/1956/announcement-of-selection> for positions with scholarships..

within 10 days starting from the next day of the publication of the final rankings on the website <http://www.unitn.it/en/ateneo/1956/announcement-of-selection> for positions without scholarships.

Applicants admitted without scholarship is granted a longer period of time in order to wait for the possible award of PhD scholarships in case of rejection of the place or renunciation of the scholarship by other applicants.

Please note that the enrolment must include the payment of stamp duty and, where applicable, the payment of the "provincial tax for the right to higher education" - TDS¹⁰.

Admitted applicants **who do not enrol within the above mentioned deadlines** will lose their right to enrol and their places will be offered to the next applicants on the relevant ranking.

Applicants who wish to assert their requirements for supernumerary positions shall request, by submission of appropriate documentation proving their status via e-mail to phd.office-st@unitn.it, such admission **within 8 days** starting from the next day of the publication of the ranking lists. Supernumerary admission is disposed within the limit of the number of supernumerary positions listed in the specific Research Area in art. 1.

Art. 9 – ENROLMENT ON THE PHD PROGRAMME

The official registration in the PhD Programme, limited to short-listed candidates who have accepted the place with the procedures set out in the preceding article, will automatically be formalized as soon as the PhD Programmes' requirements check set up by the Ministry of Education, University and Research for the AY 2015-2016 has been completed. In case of accreditation not confirmed, candidates who have accepted the place will receive a timely notification via email and the fee for the Right to Education (TDS) will be refunded.

Art. 10 – SCHOLARSHIPS

A) Scholarships are assigned to applicants on the basis of the short-list of applicants drawn up in order of merit by the Admission Committee.

The candidate who has been awarded a scholarship on a specific reserved topic, must accept it as the option for reserved scholarships he/she made in the application online implies the preference of the candidate for the award of that specific scholarship with respect to the others. The renunciation of the reserved scholarship implies the exclusion of the candidate from the right to enrol in the PhD programme. Should the candidate decline the enrolment, he/she will be deleted from the short-list and his/her place will be offered to the next suitable candidate on the ranking list. In the case of grants with specific requisites, the next successful candidate must have obtained also eligibility for the specific topic.

The gross amount of the Ministerial Scholarship is Euro 13,638.47 per year^{11, 12}.

Scholarships are normally paid bi-monthly in advance, with the exception of undue payments if the student is expelled or suspended and the first installment of the calendar year (January-February), which is paid at the end of January.

The scholarships cannot be combined with other grants, except those awarded by national or foreign scientific institutes for periods spent abroad that are deemed useful for the research activities of the student. The scholarship will be increased by 50% for research periods spent abroad that are authorized by the Director of the Doctoral Programme or by the Doctoral Committee, for periods lasting a minimum of 1 month and a maximum of 18 months.

From the second year of the course onwards, each student is provided with a budget for research activity amounting to no less than 10% of the ministerial scholarship.

The scholarship is conferred for the entire duration of the Doctoral Programme, conditional upon a positive evaluation of the Doctoral Committee at the end of each study year.

Failure to attend the Programme for over thirty days will result in suspension of the scholarship.

If during the year a student decides not to continue his/her studies, he or she forfeits the right to use the scholarship. Those who have already benefited, even partly, from an Italian doctoral scholarship cannot be granted another one.

B) For the details of research fellowships (<http://www.unitn.it/en/ateneo/1956/announcement-of-selection>)

Art. 11 - DOCTORAL STUDENTS RIGHTS AND DUTIES

The admission to the PhD Programme implies the full-time exclusive engagement of the PhD student. Students enrolled in the PhD Programme must attend the programmes, seminars, lessons and teaching units, carry out research and study activities on a full time basis in the structures designated for these purposes and submit a report on the research work done to the PhD Programme Committee at the end of each year of study. Students participating in a co-tutorship programme are obliged to carry out study and research activities in compliance with the agreement established with the foreign university.

¹⁰Please note that the total amount of TDS + duty stamp must be paid only by credit card following the instruction. At page <http://www.unitn.it/en/ateneo/1931/education-tax-tds-and-revenue-stamp> you can check if you can be exempted from TDS.

¹¹At the date of publication of the present call, Italian law (art. 2, par.26 of Law 335/95 and subsequent modifications) states that scholarships are subject to pension fund contributions (INPS) starting from 01/01/2015, of 23,50% or 30,72%, of which 1/3 will be charged to the candidate.

The PhD Programme Committee may decide to exclude PhD students from the Programme with the resulting forfeiture of the study fellowship in the following cases:

- a) unsatisfactory results in tests administered during the course year attended;
- b) negative assessment by the PhD Programme Committee concerning admission to the next year of the course; the PhD Programme Committee will verify the results for the year as well as the diligence and industriousness demonstrated by the doctoral student in his/her research;
- c) full time contracts as well as subordinate work and any occupation undertaken without authorisation from the PhD Committee;
- d) unexcused and extended absences.

Doctoral students awarded a scholarship financed by external bodies and related to a specific research activity must carry out that specific activity.

For the entire duration of the PhD Programme, doctoral students are insured by the University against accidents and civil liability that may occur in circumstances pertaining to the PhD Programme.

According to art. 2, paragraph 1 of Law 476 issued on the 13th of August 1984 and subsequent amendments, a public service employee admitted to the PhD Programme may request unpaid leave for reasons of study for the entire duration of the doctoral course and may benefit from the scholarship if the required conditions are met. In the case of admission to a doctoral course without a scholarship, or if the candidate has declined the scholarship, the employee on leave may benefit from the economic remuneration and social insurance and retirement benefits furnished by the public administration where he/she is employed. Should the employee terminate the contract in public administration in the two years succeeding his/her acquisition of the doctoral degree, the amounts paid during the course of the doctoral studies will be claimed back^{14, 13}. Public employees that have already been awarded a PhD or that have been enrolled in a Doctoral programme for at least one academic year, using unpaid leave according to law 476, have no more rights to obtain unpaid leave, with or without scholarship.

Art. 12 – DOCTORAL DEGREE AWARD

The doctoral degree, or Ph.D., conferred by the Rector, is awarded when students pass the final examination at the end of the PhD Programme.

The Examination Committee will be nominated by the Rector, upon advice of the PhD Committee and in accordance with the University Regulations for Doctoral Programmes.

The issue of the degree certificate is conditional upon the candidate uploading the University open access archive with a copy of his/her final thesis. The University archives will ensure public accessibility and the proper conservation of the thesis. The University will provide the National Libraries in Rome and Florence with a copy of the thesis, as required by Italian law.

Art. 13 – INTELLECTUAL PROPERTY RIGHTS ON RESEARCH RESULTS AND PUBLICATIONS

Without prejudice to the Italian law on copyright (legislative decree 633/1941 and subsequent amendments), use of results derived from doctorate research conducted with grants financed by external bodies may be subject to restrictions imposed by specific funding agreements of which doctoral grant-holders will be informed upon award of the grant.

Art. 14 – PERSONAL DATA

The University of Trento, abiding by Legislative Decree 196/2003 and subsequent amendments, shall use the personal data of the candidates only for the purpose of the selection procedures and for institutional reasons. Participation in the present selection entails, in observance of the above-mentioned law, that the applicant allows the University of Trento to publish his/her personal data concerning the results of the selection procedure on the University website.

Data are treated by the University of Trento, via Calepina, 14 – 38122 Trento (Italy).

Art. 15 – REFERRAL RULES

For matters not explicitly mentioned in the present announcement, please refer to art. 4 of Law no. 210 of 3.07.1998 as amended by Article 19, paragraph 1, of the Law of 30.12.2010, n. 240, to Ministerial Decree no. 45 of 08.02.2013 and to the University Regulations for Doctoral Programmes issued with the Rector's Decree no. 383 of 04.07.2013 and subsequent amendments.

¹³¹⁴ For further information refer to the mentioned law.

On behalf of
The Rector

The Head of Education and Student Services
Dott. Paolo Zanei

ANNEX A
Declaration substituting

DEGREE CERTIFICATE

(Art. 46 - lettera l, m, n - D.P.R. 28 dicembre 2000, n. 445)

The undersigned _____

Place of birth (*city+country*) _____ date of birth , _____

Official residence (*street, number, zip code, city, country*) _____

Mobile _____ e – mail _____

aware of the penal sanctions pursuant to Art. 76 of the Italian Presidential Decree no. 445 of 28.12.2000 for falsifying documents and making mendacious declarations

DECLARES

A) To have graduated in: _____

Graduation Date: _____ **with mark** _____ **out of** _____

Type of degree: Master's degree
 Laurea specialistica/magistrale
 Italian University degree of the previous regulations in force
 Other (specify) _____

University of: _____

City and Country: _____

and to have passed the following exams (fill in the subsequent Part C, mandatory)

OR ALTERNATIVELY

B) To have not graduated yet, and to be aware that admission to the PhD Programme is conditional upon the presentation of the degree certificate by the scheduled date in the call.

Currently studying (subject) _____

Type of degree: Master's degree; Laurea specialistica/magistrale; Italian University degree of the previous regulations in force; Other (specify) _____

At the University of: _____ Country: _____

Expected date for final degree defense: _____

and to have passed the following exams (fill in the subsequent Part C, mandatory)

copy of his own identification document to the present certificate.