

STUDENT
GUIDEBOOK



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1_THE SCUOLA NORMALE

The Scuola Normale Superiore in Pisa is a public institute for higher education with unique features. The selection of the students is based on merit only, classes are organized like seminars, teaching and research are closely linked, college life is an integrated part of the experience, and international exchanges are encouraged in accordance with the best models of European University Schools for Higher Education.

Founded by Napoleon I in 1810 as the centerpiece of his Italian “reform of learning” program, the Scuola Normale in Pisa was first established as a college for the training of secondary school teachers. The same function was carried out in France by its counterpart, the École Normale Supérieure in Paris. In the late twenties of the last century, a new mission was added to the old one: the promotion of high-quality national scientific and literary culture, through special doctoral programs that could be pursued by graduates from all over Italy, and later from all over the world. Since its origins, the Scuola Normale in Pisa has presented itself as an increasingly selective Italian institution, specialized in the education of the cultural elite. Three Nobel Prize winners were educated here: Giosuè Carducci, Enrico Fermi, Carlo Rubbia; two Presidents of the Republic, Giovanni Gronchi and Carlo Azeglio Ciampi, and two Prime Ministers, Massimo D’Alema and Azeglio Ciampi.

The teaching and research model on which the Scuola Normale is based is unique in the Italian university scenario, later reproduced by the Scuola Superiore Sant’Anna in Pisa, which was born in 1987 from colleges that had long been managed by the Scuola Normale. In order to pursue the undergraduate programs of the Scuola Normale, applicants need to pass a highly selective competition consisting of written and oral tests. School-leaving examination marks, the final grade of the degree or other past qualifications are not taken into account to assess the knowledge and skills of the candidates. Applicants who demonstrate a sound basic knowledge and an ability to reprocess the acquired knowledge in a constructive and autonomous way will be entitled to access the Scuola Normale.

Students undertake to attend lessons both within the Scuola Normale and in the corresponding programs at the University of Pisa. Therefore, they face two parallel and complementary educational tasks – one within the Scuola Normale, the other at the University of Pisa – and are obliged to maintain an average of at least 27/30 every year, without any mark lower than 24/30. In comparison with other university students, the students of Scuola Normale have to cope with a higher workload, which does not constitute a hindrance to their studies, but rather a continuous stimulus to improve and grow.



The research and teaching activities within the Scuola Normale are divided into two areas: the Faculty of Arts and the Faculty of Sciences. Within both Faculties, teaching is mainly seminar and workshop based. Undergraduate and doctoral students, researchers and professors work in close contact on concrete research projects. The continuous exchange of knowledge, experience and points of view develops the critical skills of the students and trains them to personally manage their education and to prepare for future choices in life. The teaching staff of the Scuola Normale contributes to this aim; they work only for the students, and closely follow them during every step of their studies.

The educational programs at the Scuola Normale are divided into two levels: Undergraduate and Doctoral. The undergraduate program corresponds to the 1st-cycle (Bachelor) and 2nd-cycle (Postgraduate) programs provided by Italian universities. In 1927, in addition to the undergraduate program, the Scuola Normale was the first institution in Italy to create a doctoral program (PhD), legally equivalent to the PhD introduced in other Italian universities in 1980. Moreover, every year the Scuola Normale announces competitions for post-doctoral grants: the grantee works in close contact with the best Italian and foreign professors within the laboratories and research centers of the Scuola Normale and has the opportunity to



collaborate with the most important and prestigious institutions, both Italian and international.

The Scuola Normale organizes its activities in buildings of great historical and architectural value, most of which overlook Piazza dei Cavalieri, in the heart of the city of Pisa. The main building is Palazzo della Carovana. The Scuola Normale system includes room, board and further services, which are provided at no cost, and to this purpose the Scuola Normale makes use of additional historic buildings located in the center of Pisa: Palazzo dell'Orologio and Palazzo del Capitano, which house parts of the library; Palazzo del Castelletto, where the administrative offices are located; Collegio Puteano, housing the Scuola Normale guest rooms; Palazzo della Canonica, which houses some laboratories and, in the future, a part of the Library.

The dormitories, the laboratories and the library are available 11 months out of the year. Students live and sleep in en-suite single rooms, and have at their disposal a free cafeteria, which is also used by the researchers, the professors and the technical and administrative staff. For their studies, students can freely access one of the largest open-shelf libraries in

Europe with about 800,000 volumes and over 4,000 periodicals.

And all this without any financial obligation from the students. The tuition fees paid to the University of Pisa are fully reimbursed by the Scuola Normale. Meals at the cafeteria are free, as are accommodation in the dormitories, the consultation of library material and the access to laboratory instruments. Furthermore, the student of the Scuola Normale is granted a small monthly allowance for other study expenses.

The Scuola Normale is part of a highly qualified university and research institution network. In addition to the University of Pisa and the Scuola Superiore Sant'Anna, the Scuola Normale actively collaborates with the National Research Council (CNR), whose largest research center is located in Pisa. By making the most of such special features, over the years the Scuola Normale Superiore has succeeded in constantly supplying the country with young talent and in being a national and international point of reference for teaching and research activities



2_UNDERGRADUATE PROGRAMS

Undergraduate programs at the Scuola Normale correspond to the 1st-cycle (Bachelor) and 2nd-cycle (Master) programs provided by the Italian university system (a three-plus-two year program). In order to pursue undergraduate work at the Scuola, students must pass competitive entrance exams. Students who are admitted from the first year of the Scuola Normale are entitled to continue for the full five years, on condition that they fulfill their yearly academic obligations.

Every student of the Scuola Normale must enroll in a degree program at the University of Pisa, and their degree program must correspond to the educational areas of the Scuola Normale in the **Faculty of Arts** and the **Faculty of Sciences**. If they fulfill their academic obligations, the students receive the Bachelor degree from the University of Pisa and the first-level diploma from the Scuola Normale at the end of their third year, and the postgraduate degree from the University of Pisa and the second-level diploma from the Scuola Normale at the end of their fifth year. Both diplomas of the Scuola Normale have no legal value.

1. Admission

The only way to access the Scuola Normale is to pass a demanding competition for admission, composed of both written and oral tests. Neither the school-leaving examination results for applicants to the first year nor the Bachelor degree



results for applicants to the fourth year count towards selection. During the admission competition, a board of professors both from within and external to the Scuola Normale assess the overall knowledge and skills of the applicants and selects the scholarship recipients on the basis of merit alone. Fundamental for passing the competitive exams are a thorough mastery of basic skills and concepts in the chosen fields, a broad general knowledge, a bent for research and, most importantly, the ability to critically reflect upon acquired knowledge.

Taking part in the admission exams is easy for both undergraduate and doctoral applicants. The announcement of the competition, with enrolment conditions for the upcoming academic year, is published yearly by May/June. It is available in paper format at the Student Services Division of the Scuola and in electronic format on the web site of the Scuola (www.sns.it). Upon request of the applicant, exams may be taken – besides in Italian — in English or French for the Faculty of Sciences and in English, French, German or Spanish for the Faculty of Arts. Traveling expenses may be reimbursed to the candidates who have been admitted to oral exams and reside more than 300 km from Pisa, up to a maximum of 350 euros.

The admission competition is open to anyone who meets the following requirements, regardless of nationality:

For the first year:

a) having attained a second-level secondary school diploma valid for enrolment in the Bachelor programs at the University of Pisa;

b) age less than 22 years

For the fourth year:

a) having attained a Bachelor degree valid for admission to the postgraduate programs at the University of Pisa;

b) age less than 25 years.

2. The Educational Model

The Scuola Normale guarantees **courses complementary** to the ones attended at the University of Pisa, for the applicants who pass the competitive admission exams. The 1 to 10 teacher to student ratio makes it possible to organize classes in a seminar format, which means encouraging interaction and discussion rather than organizing traditional *ex-cathedra* lectures. Furthermore, the student is obliged to produce reports on his/her study and research activity, and to discuss it with both the professor and the classmates: s/he is therefore continuously trained in both research and teaching.

In addition to the lectures, over the academic year both Faculties organize **conferences** and series of **seminars**, for

both an expert public and a non-specialized audience.

Traditionally, both Italian and foreign scholars are invited to hold the seminars. Such activities are oriented not only towards an audience of students and grant holders, but also towards a broader audience of scholars and thinkers.

A key moment in the academic career of any student at the Scuola Normale is the **colloquium**: between March and April, the student submits and defends a report on a research theme chosen with his/her supervisor and carried out over the academic year. This practice is compulsory for Faculty Arts students from the first year, and for Faculty of Sciences students from the third year.

2.1 Zero Cost to the Students

The Scuola Normale is free for its students. The tuition fees paid to the University of Pisa are fully refunded by the Scuola Normale, which further contributes to the study expenses of pupils attending the undergraduate programs by providing its students with a small monthly stipend. In addition, during the five years they spend at the Scuola Normale, students are provided with:

- **free accommodation** (en-suite single rooms) in one of the college dormitories owned by the Scuola Normale, with the exception of holiday periods;
- **free meals** in the cafeteria of the Scuola Normale;
- **free access** to the Library of the Scuola Normale;



- **exchange scholarships** with foreign universities and free access to **research facilities**.

Students also have the possibility of applying for **part-time jobs working** on some of the activities within the Scuola Normale. The Board of Directors of the Scuola announces the types and duration of the part-time positions annually, which in any case cannot be longer than 150 hours. Students cannot apply for more than two places. These positions are by no means related to educational obligations or exams, and they do not involve any administrative responsibilities.

2.2 Two Academic Faculties

Research and teaching activities within the Scuola Normale are organized in two different faculties: Arts and Sciences.

Faculty of Arts

The Faculty of Arts is organized into five disciplinary areas: **Ancient History and Classical Philology, Italian Literature and Linguistics, Art History and Archaeology, History and Paleography and Philosophy.**

The courses held within each area accompany the following Bachelor and postgraduate programs offered by the Faculty of Arts of the University of Pisa, which students are obliged to be enrolled in:

Bachelor Programs – Faculty of Arts

- Literature
- Humanities Computing
- Cinema, Music and Theater
- Philosophy
- History
- Cultural Heritage Sciences

Postgraduate Programs – Faculty of Arts

- Italian Language and Literature
- European Literature and Philology
- Linguistics
- Cinema, Theater and Multimedia Production
- Geography
- Philosophy and Forms of Knowledge
- Archaeology
- Art History
- Near Eastern and Middle Eastern Languages and Civilizations
- Classical Studies
- Library and Archival Sciences
- History and Civilization

Admission Exams for the Faculty of Arts

The admission exam for the **first year** is made up of three



written tests and, if they are passed successfully, three oral exams. When applying for the admission exam, the candidate must specify:

- the three subjects in which they intend to sit the written exams, chosen from Philosophy, Greek, Latin, Italian Literature, History, and Art History;
- the three subjects of their choice for the oral exams if they are different from the ones chosen for the written exams.

The admission exams for the **fourth year** are made up of two written tests and, if they are passed successfully, two oral exams. When applying for the admission exam, the candidate must specify:

- the two subjects in which they intend to sit the written exams, chosen from Philosophy, Greek, Latin, Italian Literature, History, and Art History; in any case, one of them must be in a subject taught in one of the following disciplinary areas (the corresponding postgraduate programs at the University of Pisa): Ancient History and Classical Philology (Classical Studies, Near Eastern and Middle Eastern Languages and Civilizations); Italian Language and Literature (Italian Language and Literature, European Literature and Philology, Linguistics, Cinema Theatre and Multimedia Production, Near Eastern and Middle Eastern Languages and Civilizations); Art History and Archaeology (Archaeology, Art History); History and Paleography (Library and Archival



Sciences, History and Civilization, Geography); Philosophy (Philosophy and Forms of Knowledge);

- the two subjects of their choice for the oral exams if they are different from the ones chosen for written exams;
- the disciplinary area which the candidate intends to refer to, chosen from the five current departments of the Faculty of Arts of the Scuola Normale.

Upon request of the applicant, exams may be performed – besides in Italian – in English, French, German or Spanish.

For further information please contact:
segreteria.lettere@sns.it / Tel: 050 509296 – 509170

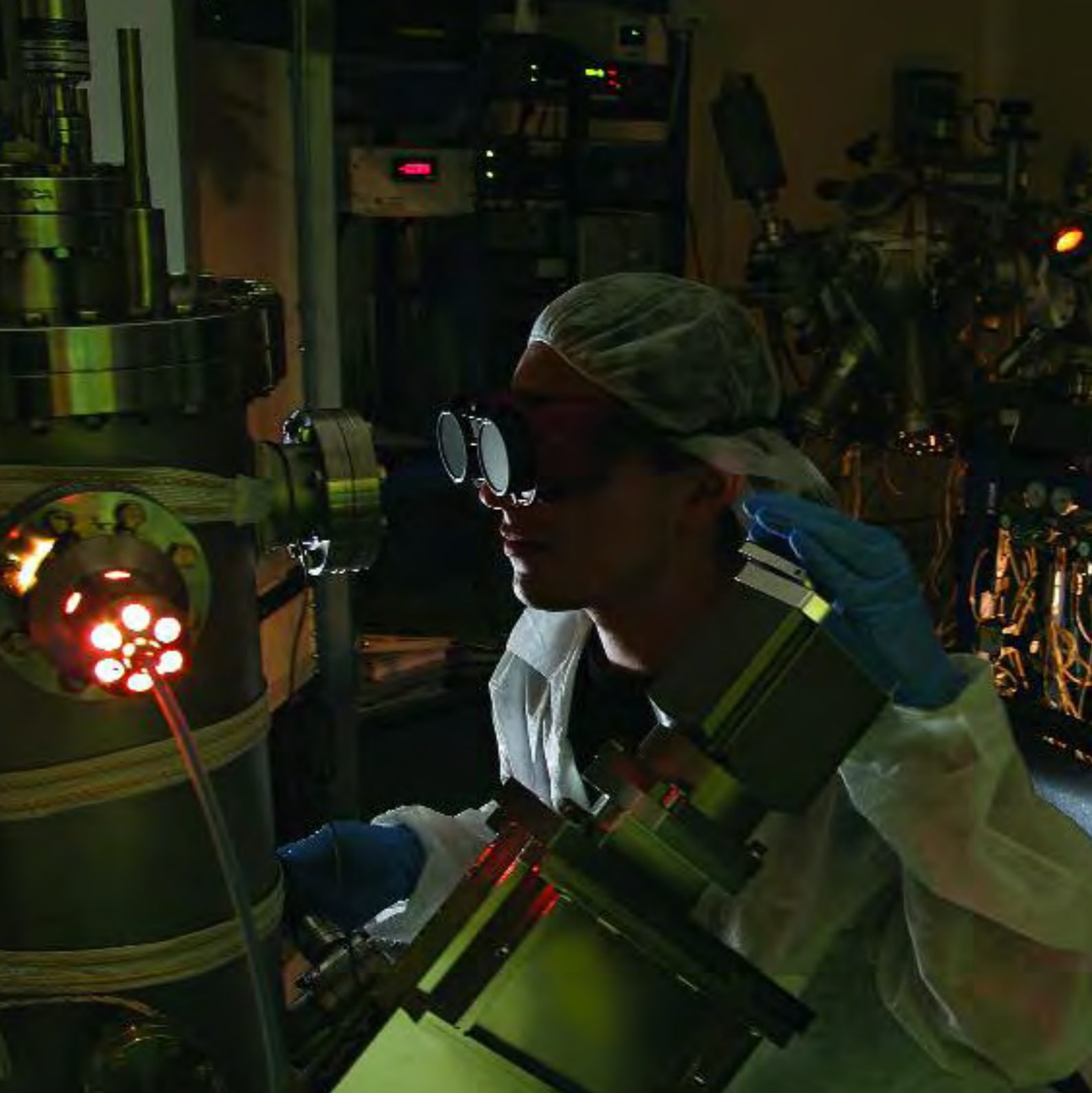
Faculty of Sciences

The Faculty of Sciences is organized into five disciplinary areas: **Biology, Chemistry, Physics, Computer Science, and Mathematics.**

The courses held within each area accompany the following Bachelor and postgraduate programs offered by the Faculty of Sciences of the University of Pisa, which students are obliged to be enrolled in:

Bachelor Programs – Faculty of Sciences

- Chemistry



- Physics
- Computer Science
- Mathematics
- Biology and Molecular Biology
- Ecology and Biodiversity
- Geology
- Natural Sciences
- Chemical Sciences and Technologies for Industry and the Environment

Postgraduate Programs – Faculty of Sciences

- Marine Biology
- Chemistry
- Industrial Chemistry
- Applied Physics
- Natural Resource Management
- Computer Science
- Mathematics
- Neurobiology
- Materials Science
- Environmental Science and Technologies
- Biomolecular Science and Technologies
- Physical Science
- Physiopathology
- Geology
- Information Technologies

Admission Exams for the Faculty of Sciences

The subjects of the competition exams for the admission to the **first year** of the Faculty of Sciences vary according to the Bachelor program of the University of Pisa which the candidate plans to enroll in:

- a) those who wish to enroll in the Bachelor programs in *Physics*, in *Computer Science* or in *Mathematics* must sit: a written exam in Mathematics, a written exam in Physics, an oral exam in Mathematics and an oral exam in Physics;
- b) those who wish to enroll in the Bachelor programs in *Chemistry*, in *Chemical Sciences and Technologies for Industry and the Environment* or in *Geology* must sit: a written exam in Chemistry, a written exam in either Mathematics or Physics (at the candidate's discretion), an oral exam in Chemistry, an oral exam in Mathematics and an oral exam in Physics;
- c) those who wish to enroll in the Bachelor programs in *Biological and Molecular Sciences*, in *Ecology and Biodiversity* or in *Natural Sciences*, must sit: a written exam in Biology, a written exam in either Mathematics or Physics or Chemistry (at the candidate's discretion), an oral exam in Mathematics, an oral exam in Biology and an oral exam in either Physics or Chemistry (at the candidate's discretion).

The written exams consist in solving one or more exercises and possibly an essay.

The subjects of the competition exams for the admission to the **fourth year** of the Faculty of Sciences vary according to the postgraduate program of the University of Pisa which the candidate plans to enroll in:

d) those who wish to enroll in the postgraduate programs in *Physical Sciences* or in *Applied Physics* must sit: a written exam in Classical Physics, a written exam in Mathematical Analysis, an oral exam in Classical Physics and an oral exam in Quantum Mechanics;

e) those who wish to enroll in the postgraduate programs in *Mathematics* must sit: a written test in Mathematical Analysis, a written test in Geometry and Algebra, an oral test in Mathematical Analysis and an oral test in Geometry and Algebra;

f) those who wish to enroll in the postgraduate programs in *Computer Science* or in *Information Technology* must sit: a written exam in Mathematical Analysis, a written exam in Computer Languages and Semantics, an oral exam in Computer Languages and Semantics and an oral exam in Algorithms and Complexities;

g) those who wish to enroll in the postgraduate programs in *Chemistry*, in *Industrial Chemistry*, in *Geology*, in *Natural Resource Management* or in *Environmental Sciences and Technologies* must sit: a written exam in General and Inorganic Chemistry, a written exam in either Organic Chemistry or

Physical Chemistry or Geology (at the candidate's discretion), an oral exam in General and Inorganic Chemistry and an oral exam in either Organic Chemistry, Physical Chemistry or Geology (at the candidate's discretion);

h) those who wish to enroll in the postgraduate programs in *Biomolecular Science and Technologies*, in *Physiopathology*, in *Marine Biology* or in *Neurobiology* must sit: a written exam in Biology and Molecular Genetics, a written exam in General Physiology and Neurophysiology, an oral exam in Biology and Molecular Genetics and an oral exam in General Physiology and Neurophysiology;

i) those who wish to enroll in the postgraduate programs in *Materials Science* must choose whether to sit all the exams as in d) or e).

The written tests consist in solving one or more exercises and possibly an essay. Upon request of the applicant, exams may be performed – besides in Italian — in English or French.

For further information please contact segreteria.scienze@sns.it / Tel: 050 509203.

Practice copies of previous exams for both Faculties are available on the web site of the Scuola Normale, at: www.sns.it/it./scuola/ammissione/corsoordinario; self-assessment exercises for Latin and Greek language, literature



and culture are also available. For information concerning admissions, student representatives may be contacted at the following address: rappresentanti@sns.it.

Candidates admitted to sit the oral tests who live more than 300 km from Pisa, or come from the Italian islands, can ask for the reimbursement of their traveling expenses up to a maximum of 350 euros.

3. Student obligations

According to Scuola Normale regulations, in order to be admitted to the next academic year and remain a student of the Scuola Normale, undergraduate students must maintain a quality level for the studies s/he carries out at the University of Pisa, as follows: **annual average marks of at least 27/30, and no single mark lower than 24/30.**

Every year by November 30 for the Faculty of Arts and by October 31 for the Faculty of Sciences, the student must submit a detailed plan of study which meets the academic obligations of their Faculty to the Student Services Division. The list of professor - mentors, who must approve the plan before it is submitted to the Student Services Division, is published at the beginning of each academic year.

First year students are encouraged to contact mentor professors and student representatives to seek direction and advice about the compilation of the plan of study.

Moreover, within the Scuola Normale, students must:

- attend the courses listed in the plan of study;
- take at least one course external to their declared field of study within the first three years;
- sit the colloquium or another oral exam in order to account for the work carried out during the year.

Within the University of Pisa, the students must:

- submit a plan of study;
- attend the courses listed in the plan of study;
- sit and pass the related exams;
- write and defend their degree thesis before the university committee.

The plan of study submitted to the University of Pisa must be consistent with the one submitted to the Scuola Normale, and they both must be approved within the Scuola Normale by the Faculty which the student belongs to.

Foreign Languages

During their years at the Scuola Normale, the students of both Faculties need to achieve and demonstrate a thorough knowledge of a first foreign language - chosen from English, French and German - and a good mastery of a second language, chosen from the aforementioned ones or from others selected by the Scuola Normale year by year. English, German and French language courses are organized every year. German and French courses are divided into three levels: Beginners (Level I), Intermediate (Level II), Advanced (Level III). English courses are divided into two levels: Intermediate and Advanced.

Within the third year, the students are required to pass Level III for the first language chosen and the Level II for the second language. Faculty of Sciences students are required to achieve Level III in English.

Students of both Faculties must attend two language courses during their first year, and sit the final exam within the summer session, with the possibility of a recuperation exam in the autumn. Students who believe they have a good knowledge of one (or two) foreign language(s), can be exempted from attending language classes, on the condition that they pass a mandatory exam.





3_DOCTORAL PROGRAMS (PHD)

In 1927, in addition to the undergraduate program, the Scuola Normale was the first institute in Italy to create a doctoral program (PhD). It consists in three years of study and research, at the end of which – if academic obligations are met - the students are awarded the Doctor of Philosophy (PhD) of the Scuola Normale Superiore, which is legally equivalent to the PhD of Italian universities. Economic support for PhD students at the Scuola Normale is higher than that which PhD students are usually given: it includes a contribution for accommodation and meals and funds for mobility and research.

Doctoral students take part in research groups, and their lives and their academic careers are fully integrated in the Scuola Normale system. Students share research and education experiences with other students and professors, each draws up a **research proposal and plan of study organized in accordance with her/his needs and profile**, and students may use all the study and research facilities and services provided by the Scuola.

Students may carry out their dissertation in **joint programs with universities or doctoral schools in other countries**, within specific collaboration agreements between professors and research groups at the Scuola Normale and colleagues in foreign universities. Such students spend study periods abroad and they defend their PhD dissertation before a joint committee.



1. Admission

The competition for doctoral positions at Scuola Normale is based on work to date and exams. The number of positions available is established year by year, usually 25-30 for each Faculty. The announcement of the competition, with enrollment conditions for the upcoming academic year, is published by May/June. It is available in paper format at the Student Services Division of the Scuola and in electronic format on the web site of the Scuola (www.sns.it).

Specific places are reserved for non-EU students, who are assessed on work to date only, whereas EU student are assessed on both work to date and admission exams. The admission competition is open to anyone who meets the following requirements, regardless of nationality:

- a) possession of a valid postgraduate degree or equivalent within the deadline set by the announcement of the competition;
- b) less than 30 years of age by the announcement deadline.

Candidates are assessed by a committee of Italian and foreign professors who take into consideration:

- the research project submitted by the candidate;
- the final grade of the postgraduate degree;
- the degree thesis;
- the academic transcript, listing the courses taken at the

university;
- publications;
- letters of recommendation by professors who are familiar with the candidate's studies.

The work to date and research project are preliminarily assessed by committee. Selected candidates are then admitted to the exams, which consist in an interview for the **Faculty of Arts** and in a written exam and an interview for the **Faculty of Sciences**.

Candidates who are admitted to sit the oral exam and live more than 300 km from Pisa, or come from the Italian islands, can ask for the reimbursement of their traveling expenses up to a maximum of ff 350.

2. Rights of Doctoral Students

Graduate students at the Scuola are provided with:

- **free accommodation** (en-suite single rooms) in one of the college dormitories owned by the Scuola Normale, with the exception of holiday periods; should no accommodation be available, doctoral students will receive an **additional housing allowance** of ff 3,800 gross per year;
- **free meals** in the cafeteria of the Scuola;
- **a fellowship**, the amount of which is established yearly by the Board of Directors of the Scuola (about ff 9,200 gross per year);

- **free admission** to the Library of the Scuola Normale;
- the allocation of **research** and **international mobility funds** and free access to **research facilities**.

Moreover, the Faculties authorize and encourage the students to take part in study and research activities outside the Scuola Normale; full reimbursement will be provided in this case, too.

3. Student obligations

During the first year, the **doctoral students** of the **Faculty of Arts** must attend three courses (at least one of which at the Scuola Normale), agreed on with their supervising professors, and a foreign language course. In the next two years, the student is required to attend two courses (at least one of which at the Scuola Normale), agreed on with their supervising professors, and can spend a study and research period abroad, at a foreign institution.

Every year, the **doctoral students** of the **Faculty of Sciences** must submit a plan of study to the Faculty for approval. It must be coherent with the student's academic requirements and can include courses held both at the Scuola Normale and at the University of Pisa. First-year doctoral students must include three courses in their syllabus. Students are encouraged to contact their supervising professors to seek direction and advice about the compilation of the plan of study and its deadlines.





Doctoral students must attend the Scuola Normale seminars and University of Pisa courses listed in their plan of study; they must pass the corresponding exams and submit a report on their research results to their supervision professor. The report is discussed and defended during a colloquium, which students are required to pass in order to be admitted to the following year.

Before the student defends the PhD dissertation, it must be reviewed by a board of three experts, chosen in an international environment (the official supervisor and two external specialists), and their positive opinion is necessary to proceed with the defense. The defense takes place before a board of seven Italian and foreign experts of the research field of interest. After the dissertation, the PhD diploma is awarded with a maximum mark of 70/70 (with or without honors), and it is stated by law to be equivalent to a Doctor of Philosophy degree.

For further information please contact:
segreteria.studenti@sns.it / Tel: 050 509236



4_STUDENT MOBILITY

Undergraduate and doctoral students of the Scuola Normale can participate in **exchange fellowship programs** and spend study periods abroad based on specific framework conventions between the Scuola Normale and some of the most important international universities. The fellowships generally include free room and board for the students provided by the hosting universities. The quantity, the duration and characteristics of the exchange fellowships are established year by year, dependent upon available funds of the Scuola Normale and the existing agreements between the Scuola Normale and foreign university institutions and research centers.

Applications for fellowships generally include the following documents:

- a research project;
- a recommendation and approval letter from one or more professors, at least one of whom from the Scuola Normale;
- a statement of knowledge of the language of the hosting country, if required by the exchange agreement.

There are also further possibilities to spend a period abroad (University of Chicago, University of California – Berkeley, University of Tokyo), based on agreements which are not dependent upon any financial support by the hosting

university, but only the awarding of the status of “visiting student”.

The allowances for study and research activities abroad and exchange fellowships are not automatically mutually incompatible, and, in particular cases, they can be jointly exploited to carry out complex research projects in Italy and abroad. In order to be granted the allowances, students must discuss the application with their supervising professors, and submit it together with the professor’s opinion.

In addition, the Scuola Normale takes part in the Socrates-Erasmus project. Summer **grants** for intensive language courses offered by the association Amici della Scuola Normale (Friends of Scuola Normale) are also available: the announcement and the enrolment conditions are published yearly by May/June. The grants are awarded by the Director, based on the decisions of the Committee for International Exchange and Relations in collaboration with the Foreign Language Lecturers of the Scuola Normale. The selection takes into account the attendance of foreign language courses at the Scuola, the mark achieved in the final foreign language exams and the awarding of similar fellowships in the previous years, if any.



4.1. Exchange Agreements

The Scuola Normale has signed reciprocal students exchange agreements with the following foreign universities.

Switzerland:

Université de Genève (www.unige.ch)

Université de Lausanne (www.unil.ch)

Universität Zürich (www.unizh.ch)

Spain:

Universidad Complutense de Madrid (www.ucm.es)

Universidad de Salamanca (www.usal.es)

Germany:

Freie Universität Berlin (www.fu-berlin.de)

Technische Universität Dresden (www.tu-dresden.de)

Ludwig Maximilians Universität München (www.uni-muenchen.de)

Universität des Saarlandes (www.uni-saarland.de)

Universität Tübingen (www.uni-tuebingen.de)

France:

École Normale Supérieure Cachan (www.ens.cachan.fr)

École Normale Supérieure Lyon (www.ens-lyon.fr)

École Normale Supérieure Lettres et Sciences Humaines Lyon

(www.ens-lsh.fr)

École Normale Supérieure Paris (www.ens.fr)

Université Marc Bloch Strasbourg (<http://u2.u-strasbg.fr/ici/UMB/site>)

Czech Republic:

Filozoficky Ustav Av Cr - Praga (www.flu.cas.cz)

**England:**

University College London (www.ucl.ac.uk)

The Warburg Institute - London (www.sas.ac.uk/warburg)

Corpus Christi College Oxford (www.ccc.ox.ac.uk)

St. John's College Oxford (www.sjc.ox.ac.uk)

United States:

Harvard University Department of Romance Languages and Literatures (www.fas.harvard.edu)

University of California - Los Angeles (www.ucla.edu)

University of Chicago (www.uchicago.edu)

Japan:

University of Tokyo (www.u-tokyo.ac.jp)

The Scuola Normale has also signed agreements for specific joint study (joint supervision) with:

France:

École Nationale des Ponts et Chaussées en France – Marne la Vallée (www.enpc.fr)

Université de Bourgogne (www.u-bourgogne.fr)

Université de Bretagne Occidentale – Brest (www.univ-brest.fr)

Université Joseph Fourier - Grenoble I (www.ujf-grenoble.fr)

Université Lumière Lyon 2 (www.univ-lyon2.fr)

Université de la Méditerranée – Marseille

(www.mediterranee.univ-mrs.fr)

Université de Nice Sophia-Antipolis – Nice (portail.unice.fr)

École des Hautes Études en Sciences Sociales – Paris

(www.ehess.fr)

Institut d'Etudes Politiques de Paris (www.sciences-po.fr)

Université de Paris I – Panthéon Sorbonne (www.univ-paris1.fr)

Université de Paris III – Sorbonne Nouvelle (www.univ-paris3.fr)

Université de Paris IV – Sorbonne (www.sorbonne.fr)

Université de Paris IX – Dauphine (www.dauphine.fr)

Université de Paris X – Nanterre (www.u-paris10.fr)

Université Paris Sud XI (www.u-psud.fr)

Université de Paris XII – Val de Marne (www.univ-paris12.fr)

Université de Paris XIII – Paris Nord (www.univ-paris13.fr)

Université de Poitiers (www.univ-poitiers.fr)

Université de Provence (www.up.univ-mrs.fr)

Switzerland:

University of Zurich (www.uzh.ch)

Germany:

Technische Universitaet Berlin (www.tu-berlin.de)

Ruhr-Universitaet – Bochum (www.ruhr-uni-bochum.de)

Technische Universitaet Kaiserslautern (www.uni-kl.de)

Austria:

Universitaet Wien (www.univie.ac.at)

Croatia:

University of Zagreb (www.unizg.hr)

For further information please contact:

international@sns.it / Tel: 050 509319



5_STUDENT ORIENTATION,
POSTGRADUATE EDUCATION

1. Pre-University Orientation Courses

Every summer the Scuola Normale organizes pre-university orientation courses for the most worthy students who are about to attend their final year of secondary schools. An average of about one hundred students for each session spend an intense week inside real university campuses, organized for this occasion by the Scuola Normale in five Italian towns: **Cortona**, **Colle Val D'Elsa**, **Camigliatello Silano**, **Rovereto** and **San Miniato**. Selected students can take part in the courses for free; an additional number of participants, who are obliged to pay for room and board, are also admitted to the courses every year.

Thanks to the direct contact not only with professors from the Scuola Normale and other universities, but also with outstanding figures from institutions, business, culture and art invited by the Scuola Normale, students learn about some paths they could follow after they have completed their secondary school studies. The main aim is to help worthy young students make a more informed and reasoned choice about their future university studies and to show them a broader range of choices than the ones which they may have already taken into consideration.

Each course includes three/four lessons per day, after which students are given the possibility to talk with professors,



investigate the suggested topics, and seek information about institutions and educational choices. Traditionally lectures are held in Italian literature, history, philosophy, art history, archaeology, law, economics, medicine, engineering, architecture, physics, mathematics, biology, computer science, and chemistry. However, in every session different topics may be included.

Graduate students of the Scuola cooperate with the professors by holding seminar-lectures, organizing tutoring activities and presenting their most recent and up-to-date research and study experiences, which are likely to be very close to what the students are going to face within their university career.

Admission

The Scuola Normale sends an annual letter of inquiry to over 2,500 headmasters of schools within Italy and some Italian schools located abroad, asking them to indicate **from one to three worthy students attending the fourth (next-to-last) year of secondary school**, who may be interested in taking part in the pre-university orientation courses. The headmasters are asked to provide, with the collaboration of the selected students, some data concerning the students' curriculums, and a short description of the student, including the final marks of the two previous school years, the professional and academic fields of study in which the student is primarily

interested, and motivations for the student to participate in this activity. Recommendations may only be submitted to the following Internet address: <http://orientamento.sns.it>.

To submit their recommendations, schools have to log in using the **access code** provided in the letter from the Scuola Normale. Schools that have already carried out this procedure in past years use the username and password they already have.

The Scuola Normale guarantees that courses are attended by students from all over Italy: each Italian region is represented in proportion to the number of schools that have submitted their recommendations. Generally, a number of students ranging from 300 to 400 is selected.

The list of the admitted students is published on the web site of the Scuola. Admitted students - as well as their headmasters - are individually informed of the results of the selection process, and of the location of the course which the student is invited to attend.

Additional students who are found worthy (**in this case as well a selection is made**), who wish to take part in the courses, contingent upon payment of room and board (course attendance is always free), are also admitted.

The application should include the final marks of the two previous school years, a curriculum and a letter of intent.

Some of the places available upon payment of room and board

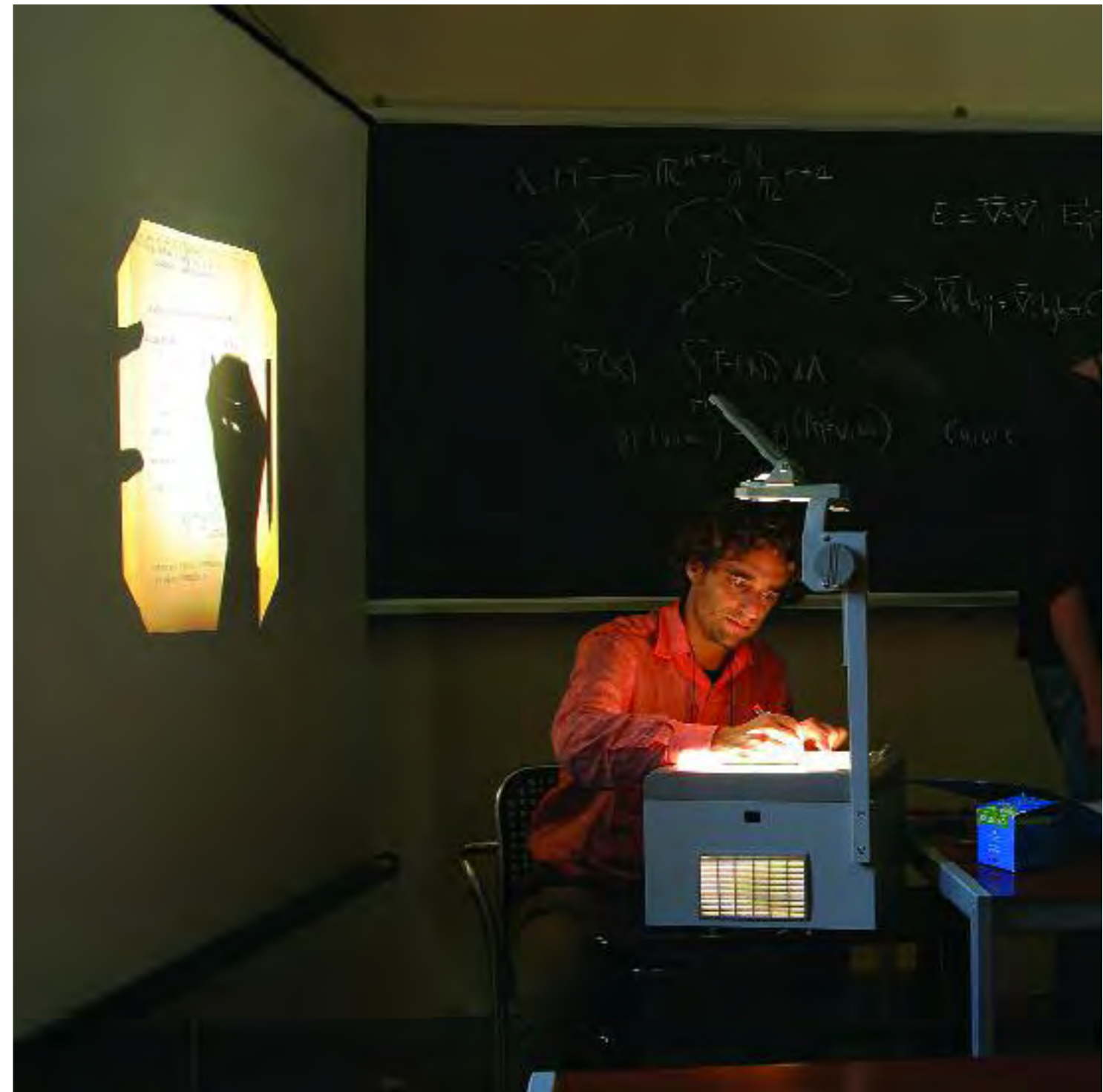
may be reserved to students in their last year of secondary school.

Interested students may submit their application to the Internet address: <http://orientamento.sns.it>, where they will find all the necessary instructions for logging in and applying for the courses, as well as information about living expenses, including room and board in the facilities that have specific agreements with the Scuola.

2. Orientation Courses for the postgraduate degree at the Scuola Normale

Since 2006, the Scuola Normale has also organized orientation courses for undergraduate students who are interested in pursuing the fourth and fifth years of their studies at the Scuola Normale. Every summer, a group of selected students attends a program of four days of lectures given by professors of the Scuola Normale, to understand the type of education offered and the level of research carried out there. Two courses are held: one covers the scientific and the other the humanistic disciplines taught at the Scuola Normale. Both courses last four days and are held during the month of July.

Students are offered the opportunity to talk with professors and doctoral students, to seek information about the Scuola Normale Superiore, the competitive admission exams and possible educational development. The students selected have



the opportunity to present their Bachelor degree thesis and to discuss the research topics they are primarily interested in.

Attendance is free, and admitted students are granted free room and board and a contribution to traveling expenses. At the end of the course students receive an attendance certificate, listing the lectures and seminars attended.

To take part in the courses students must have earned, or being about to earn, a Bachelor degree valid for admission to the postgraduate programs in Italian universities and be under 25 years of age.

Enrollment conditions and deadlines for the submission of applications are published annually by March. The Scuola Normale bases its selections on the data and information submitted by the candidates. Students will be selected who the Scuola Normale considers most suitable for the education/information courses proposed, on the basis of their study and research interests, courses previously attended and results obtained.

The list of selected students is published on the web site of Scuola Normale Superiore.

For further information please contact:
orientamento@sns.it / Tel: 050 509030 – 509749 - 509323



3. Post-Doctoral Grants

The Scuola Normale announces **post-doctoral grant** competitions every year. Grant holders work within the research facilities of the Scuola, in close contact with the best Italian and foreign professors and have the opportunity to collaborate with important and prestigious institutions.

Admission

Applications are invited from scholars who have not yet reached 35 years of age by application deadline, with a PhD or equivalent degree earned in Italy or abroad, who have not previously received any other post-doctoral research grants (with the exception of grants offered by national or foreign institutions with the aim of integrating the education or research of the grant holder with study periods abroad). The competition and selection is based on work to date (degrees, publications, curriculum of the candidate) and on a submitted research project, assessed by a specific committee appointed by the President of the Scuola Normale.

Conditions

By the end of the first year, committee decides whether to confirm the grant or not. The grant holder must submit a report on the research activity carried out up to then, presenting the results obtained and the part of the research project still to be performed. The grant can not be renewed at

the end of the two-year period. During the period of study at the Scuola Normale, the grant holder can neither be engaged in teaching activities, nor work as an employee, nor provide paid and ongoing professional consulting, nor carry out activities that are incompatible with the research activities performed at the Scuola Normale. Should such requirements not be fulfilled, the Scuola Normale can decide to interrupt the grant.

For further information please contact:
segreteria.studenti@sns.it / Tel: 050 509237

4. Internships and Placement and Career Service

The service offered by the Scuola Normale encourages contact between its students and alumni and the professional world, thus promoting student entry into the world of work, also in non-academic contexts. A brief overview the services provided follows:

a general orientation interview, aimed at profiling the candidate and at identifying his/her knowledge and skills best suited to the job market as well as the fields and areas of professional interest for the candidate. This interview is sufficient when the candidate already has a clear professional objective;
a second-level orientation and abilities assessment interview, performed by an occupational psychologist, aimed at helping



candidates who do not have a precise professional objective yet or who are compelled or wanting to change jobs. The second-level interview is based on all the key elements concerning work in the life of the candidate, and in particular: motivation, skills, interests, values, work methods, work environment, personal style and features, and weaknesses; preparation of selection and competition announcements and pre-selection of candidates for internship programs within specific agreements with firms and companies; preparation of customized internship projects, upon request of the students; guidance in the preparation of the necessary documents to enter the world of work, such as: *curriculum vitae*, *reference letters*, etc.;

enquiry service on the job opportunities in companies, on job advertisement and competitions of interest;

consultancy service on the legal and judicial aspects of employment contracts;

organization of recruiting days and meetings with companies;

mentoring service with alumni of the Scuola Normale, who have already entered the world of work, aimed at promoting comparison and acquaintance with specific professional figures of excellence.

All the undergraduate and doctoral students of the Scuola Normale can benefit from this service.

For further information please contact:
placement@sns.it / Tel: 050 509307

5. Post Graduate and Continuing Education

Since 1997, the Scuola Normale has organized courses of advanced training in the field of cultural heritage. The aim of these activities is to combine a solid humanities background with the knowledge of the most advanced technologies and electronic systems, which may be used for management and research in this field. The result that the Scuola Normale wants to achieve is the training of highly qualified and specialized professional figures endowed with interdisciplinary skills, employable not only in museums, publishing and communication, but also in urban planning and restoration.

The courses, which benefit from the contribution of leading personalities and institutions in the academic and professional (both Italian and international) scenario, are characterized by highly innovative content and the experimental nature of the methods used.

For further information please contact:
placement@sns.it / Tel: 050 5093030



6_COLLEGE LIFE

Throughout his/her stay at the Scuola Normale, every student freely accesses the facilities provided and in particular: a) one of the five dormitories of the Scuola Normale, b) a cafeteria in common with the teachers and staff of the Scuola Normale, c) the Library of the Scuola Normale and all library resources, and d) the laboratories of the Faculty of Arts and of the Faculty of Sciences.

The Cafeteria

The Scuola Normale provides its students not only with housing, but also with board in a self-service cafeteria, which all internal users (students, professors, research associates, grant holders, non-teaching staff and guests) can access. It is open from 12.20 p.m. to 2 p.m. and from 7.30 p.m. to 8.30 p.m. Monday through Friday, and from 12.30 p.m. to 1.45 p.m. and from 7.30 p.m. to 8.30 p.m. on Saturday and Sunday. The cafeteria is closed during university holidays and on the first of May. Every year a spokesperson is elected from among the students, to collaborate with the catering service as spokesperson for the students.

Breakfast Service

In every dormitory students are provided with a daily breakfast, served either in the cafeteria, for the dormitories nearby, or in special rooms within each dormitory. Breakfast is served from 7.30 a.m. to 9.15 a.m. Monday through Friday, and from 8.00 a.m. to 10.00 a.m. on Saturday and Sunday.

1. The Library

The Library was founded along with the Scuola Normale and has gradually expanded to a size of more than 800,000 volumes and 4,000 periodicals, while always guaranteeing open access. Today it is the largest open-shelf library in Italy. It is housed in three buildings, whose histories are related to the historical and architectural memory of the town: Palazzo della Carovana, where the periodical section is located, Palazzo della Gherardesca, currently housing most of the volumes, and Palazzo del Capitano, housing the whole section of Sciences (volumes and periodicals), the sector of Art and the sector of Antique and Rare Works.

The catalogue of the works is completely on-line and can be consulted at the following address:

<http://catalogo.biblio.sns.it/F>.

Internal users (students and professors) are automatically provided with a card that allows them to freely access all the library services, valid throughout their period of stay at the Scuola Normale (including advanced booking of resources previously checked out by other users and extensions of loan periods).

The Library provides the users the following services:

- a) on-site consultation;
- b) help and information on the use of the Library and its



- c) access to on-line (internet and intranet) databases;
- d) photocopying and network printing (smart cards for photocopies and network printing are given to the students when they enter the Scuola Normale; these can be recharged in the Library);
- e) local loan of materials for internal users, up to a maximum of six items, and up to two months for each loan. The items excluded from loan can be given to internal users in the evening or during holidays only, but must be returned before 11 a.m. the next morning;
- f) interlibrary loan, national and international;
- g) microfilm and photocopies on-demand from Italian and foreign libraries (free document delivery service for internal users) and sending of photocopies to Italian and foreign libraries and individual applicants.

The acquisition of complete collections belonging to important figures of culture and research contributes significantly to the ongoing, rigorous development of the library collections. The tradition dates back to the 19th century, but a few libraries can be cited as examples: those of Giorgio Pasquali, Delio Cantimori, Arnaldo Momigliano, Sebastiano Timpanaro, Cesare Luporini, Vittore Branca, and Eugenio Garin. Also the personal archives (collections of letters, papers, notes) of outstanding scholars are often given to the

library; together with the books that used to belong to them, these archives give an important contribution to the reconstruction of the personality of the scholar, his/her activity, his/her relationships with the culture and society of the time and are, therefore, important sources for multi-oriented research. Interlibrary loan and document delivery services, which are free for internal users, must be requested at the following address: baschieri@sns.it. The Library is open Monday through Friday from 9.00 a.m. to 7.30 p.m.; and from 9.00 a.m. to 1.45 p.m. on Saturdays.

For further information please contact:
Reception, Tel. 050 509205.

The **Archives** of the Scuola Normale, annexed to the Library, include the historical archives of the Scuola Normale, the extremely rich Salviati Archive (left to the Scuola Normale by the family), the Archive of Collegio Puteano, the Archives of Delio Cantimori, Pietro Silva, Manfredi Porena, Ernesto Sestan and Roberto Vivarelli. The most recent acquisition, the Michele Rosi Archive, dates back to 2006.

2. Laboratories and Research Groups

An extremely significant aspect of the Scuola Normale is the intertwining of education and research, which is a peculiar feature of both undergraduate and doctoral programs.

Students of either Faculty work in the research facilities with activity closest to their own studies, thus initiating early research activity.

The laboratories and research groups of the Faculty of Arts are:

- **Linguistics Laboratory;**
- **Laboratory of Visual Arts;**
- **Laboratory of History, Archaeology and Topography of the Ancient World;**
- **LARTE** - Interdisciplinary Center for the Research, Planning and Management of Cultural Heritage;
- **SIGNUM** - Center for Computer-Based Humanities Research;
- **CTL** - Center for Data Processing of Texts and Images in the Literary Tradition;
- **LILA** - “G. Nenci” Laboratory of Computer Sciences for Ancient Languages;
- **Archives Center;**
- **Center for Medieval Culture;**
- **Research Group on Ancient Greek Music;**
- **Research Group on Private Modern Philosophy Collections.**

Linguistics Laboratory

Director: Prof. Pier Marco Bertinetto

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: lab.linguistica@sns.it / <http://linguistica.sns.it>

The Laboratory operates in areas of Linguistics like phonetics, phonology, morphology, psycholinguistics, pragmatics and computational linguistics which make use of (and in some cases actually require) specialized instrumentation. It also provides logistical support for all the research activities conducted by linguists at the Scuola Normale, even in purely theoretical areas like syntax and semantics.

The Laboratory is equipped with computers and devices for speech digital recording, analysis and synthesis, equipment for gathering responses during psycholinguistic tests, software for statistical analysis, a sound-proof booth for recording and many other instruments (electro-palatograph, nasal flow meter, laryngograph).

The Laboratory organizes international seminars and conferences in specific areas of Linguistics and actively collaborates with researchers from different Italian and foreign universities.

Some important projects include:

- API Project (Archives of Spoken Italian);
- CLIP Project (Linguistic Corpus of Spoken Italian);
- CoLFIS Project (Corpus and Frequency Lexicon of Contemporary Written Italian).

The *Quaderni del Laboratorio di Linguistica della SNS*, available online (<http://linguistics.sns.it/Quaderni.htm>) and distributed on CDs, report on completed or in-progress research activity.

Laboratory of Visual Arts

Director: Prof. Massimo Ferretti

Location: Palazzo del Capitano, piazza S. Felice, 7

Info: artivisive@sns.it / www.artivisive.sns.it

The Laboratory of Visual Arts carries out activity in the field of the images of reproduction. Its research activity aims to create digital and on-line accessible data archives, with two main areas of interest:

- a) photography and visual archives: studies on photography and photo collections, research on historical collections and standards for photographic material cataloguing;
- b) perception and language in communication: digital images and visual perception, the language in museum web sites and editorial content for the web, art history teaching.

Among the ongoing projects there are the computerized archives for a non-destructive analysis of art works, especially infrared reflectographic analysis revealing the drawing lying under the paintings. The archive was begun in 2003 and is currently cataloguing material acquired by a joint workgroup established a few years ago with the University of Bologna, the State University of Milan and the Laboratory of Visual Arts of Scuola Normale.

Laboratory of History, Archaeology and Topography of the Ancient World

Director: Prof. Carmine Ampolo

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: labtopog@sns.it / <http://satma.sns.it>

The Laboratory carries out interdisciplinary research in the fields of history, archaeology, topography and epigraphy of the ancient Greek and Roman world, with a particular focus on the areas of Southern Italy and Sicily.

Its main research areas are:

- a) the study of the processes of land and urban settlement and their features in Magna Graecia and Sicily; these processes are examined using methods common both to historical and archaeological research, ranging from stratigraphic excavations to archaeological prospection;
 - b) the study of epigraphic documents to gain a better understanding on themes such as navigation and commerce in the ancient world and the problems of cultural contact in the areas affected by Greek colonization;
- research in the field of historiography and lexicography, in collaboration with the G. Nenci Laboratory of Computer Sciences for Ancient Languages;
- An intense teaching activity and diffusion of research results (seminars, conferences, exhibitions, publications).



LARTTE - Interdisciplinary Center for the Research, Planning and Management of Cultural Heritage

Director: Prof. Salvatore Settis

Location: Palazzo della Canonica, piazza dei Cavalieri, 8

Info: labpat@sns.it

www.sns.it/it/laboratori/laboratorilettere/gestpatr

The LARTTE Laboratory carries out interdisciplinary research in the field of cultural heritage. The activity of the center is organized in three main directions:

- a) development of an observatory, with the aim of gathering and critically classifying information on cultural heritage;
- b) creation and management of a laboratory to develop innovative projects;
- c) development of a training center, where research, teaching and planning are closely interrelated.

Research areas of interest are: international, regional and local laws on cultural heritage issues; studies on cultural heritage safeguarding and enhancing at an international, regional and local level; cultural heritage management methods, with particular attention to the interactions among public, private and non-profit organizations, in order to identify the advantages of the different management models; permanent and temporary exhibitions, with the aim of creating a reference center; the professional figures involved in cultural heritage management.

SIGNUM - Center for Computer-Based Humanities Research

Director: Prof. Michele Ciliberto

Location: "Complesso Polvani", via della Faggiola, 19

Info: info@signum.sns.it / www.signum.sns.it

The activity of the SIGNUM Center aims to develop solutions for archiving, cataloguing, researching and analyzing collections of structured sequences (relational archives and catalogues), semi-structured sequences (XML documents) and non-structured sequences (texts or biological sequences). Alongside this basic research, SIGNUM also performs technological experimentation and develops applications and software libraries which can be used by the academic community and by Scuola Normale Superiore partner organizations. The libraries are the building blocks on which innovative applications in the fields of archive management and document cataloguing, data compression, computational linguistics, the Web, research engines and bioinformatics are constructed. Many of these applications are developed within SIGNUM, others by external experts with SIGNUM's technological input.

SIGNUM also carries out training and communication in the field of computer-based humanities research, organizing internships and informational seminars in collaboration with universities and public and private research centers.

CTL - Center for Data Processing of Texts and Images in the Literary Tradition

Director: Prof. Lina Bolzoni

Location: Piazza San Felice, 7

Info: ctl@sns.it / www.ctl.sns.it

The CTL conducts research using computer technology to examine the broad areas of interaction between words and images that have characterized the literary tradition across different periods and genres. The creation of a digital archive of words and images is the main instrument to reconstruct the many links that exist between linguistic code and figurative code. Ongoing research projects include:

- a) An atlas of images of memory: a digital archive of texts and images from treatises on the art of memory; a second phase of the project will concern texts and images of memory used in different fields in medieval and Renaissance culture;
- b) European CNR "Diligent" project: the CTL is a partner in Diligent (Digital Library Infrastructure on Grid Enabled Technology), making some of its archives available for research. The aim of the project is the creation of an advanced platform that will allow scholars to share knowledge and collaborate in a secure, coordinated and dynamic way; its most innovative aspect is the interaction between Grid and DL (Digital Library) technologies, which could lay the foundations for a new generation of scientific infrastructures.



LILA - G. Nenci Laboratory of Computer Sciences for Ancient Languages

Director: Prof. Carmine Ampolo

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: alphamail@sns.it / <http://smsgreek.sns.it>

The Laboratory is involved in the creation, use and release of data processing tools for classical studies. The activity of the laboratory is focused on three main projects:

- a) creation and release of the several versions of the application SNS-Greek and Latin, for Windows and Mac OS X, a query tool to access three databases (Greek texts, classical Latin texts, and Greek documentary papyri and inscriptions) on CD-ROM;
- b) preparation of self-assessment exercises for Greek and Latin language, literature, history and civilization, with different levels of difficulty and knowledge; the exercises are available on the web site of the Scuola Normale Superiore;
- c) preparation of indices for some large historical works on the ancient world that are lacking them.

LILA collaborates with the Laboratory of History, Archaeology and Topography of the Ancient World of the Scuola Normale in research projects on the lexicon of ancient economics and finance, the lexicon of ships and navigation during the ancient Greek-Roman age, and on the Greek and Latin historiography lexicon. LILA provides the users (professors, researchers and



students) with assistance on how to use the consultation software and the data processing tools in the field of ancient history and classical philology, including the different fonts of ancient Mediterranean languages. The Laboratory collaborates with the Scuola Normale Library, where computers for the consultation of its databases have been installed; it organizes seminars and promotes cultural activities on Latin and ancient and modern Greek classics.

Center for Medieval Culture

The **Center for Medieval Culture**, which has long been headed by Prof. Armando Petrucci, carries out four types of activity aimed at increasing knowledge of the medieval age and studying the culture developed in Europe over that period:

- editing and publication of critical editions of texts and essays on the history of European medieval culture;
- financing research on the history of European medieval culture;
- organizing seminars and conferences on topics related to the history of European medieval culture;
- inviting Italian and foreign experts to the Scuola Normale, for seminars and research activities.

The series of publications of unpublished or rare medieval (Latin, Greek or Vulgar) texts is edited by Professor Armando Petrucci, together with a committee composed of Gian Carlo Alessio, Paola Barocchi, Enrico Castelnuovo, Claudio Ciociola,

Gianfranco Fioravanti, Michele Luzzati, Giovanni Nencioni, Cesare Segre, Loris Sturlese and Alfredo Stussi.

Research Group on Ancient Greek Music

Director: Dr. Maria Chiara Martinelli

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: m.martinelli@sns.it /

www.sns.it/it/laboratori/laboratorilettere/musica

The common project of this group is a study on the practice of the *mousiké* and its meanings through the analysis of literary, papyrological and epigraphic sources.

The idea of creating a research group on ancient Greek music at the Scuola Normale dates back to 2001, during a seminar held by Maria Chiara Martinelli in the course of Rhythm and Metrics at the Department of Classical Philology of the University of Pisa.

Research topics reflect the interests of the scholars taking part in the group, and range from problems concerning the performance and transmission of musical texts in the Hellenic age, to philosophic reflection on music and to theories concerning perception of sound and consonance.

Research Group on Private Modern Philosophy Collections

Directors: Dr. Renzo Ruggianti, Dr. Alessandro Savorelli

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: r.ragghianti@sns.it / a.savorelli@sns.it /
www.sns.it/it/laboratori/laboratorilettere/bibliotechefilosofiche

This research group aims to publish online and CD catalogues of important private collections from philosophers and from scholars, who gathered remarkable collections of philosophy texts. Research on the philosophical texts from the private collections of philosophers and scholars (historians, legal experts, men/women of letters and scientists) from the end of the 1600s to the beginning of the 1900s not aiming at intellectual biography or mere erudition but rather endeavoring to facilitate research in philosophical history and the history of ideas.

The laboratories and research groups of the Faculty of Sciences are:

Neurobiology Laboratory

NEST Laboratory - National Enterprise for nanoScience and nanoTechnology

Molecular Biology Laboratory

Ennio De Giorgi Mathematical Research Center

Research Group in Astrophysics

Research Group in Elementary Particle Physics

Research Group in Calculus of Variations and Geometric

Measure Theory

Research Group in Harmonic Analysis

Research Group in Infinite Dimension Analysis

Research Group in Theoretical Physics

Research Group in Condensed Matter Theoretical Physics

Research Group in Diophantine Geometry

Research Group in Dynamic Systems

Research Group in Complex Analysis and Analytical Geometry

Neurobiology Laboratory

Director: Prof. Lamberto Maffei

Location: CNR Institute for Neurosciences, via G. Moruzzi, 1

Info: volpi@in.cnr.it

www.sns.it/it/laboratori/laboratoriscienze/neuro

The activity of this Laboratory, which studies the nervous system, is especially focused on the conditions that can reduce or eliminate sight impairments that in most cases are due to different kinds of lesions, either surgical or accidental. The Laboratory works on the tissue plasticity of that part (visual cortex) of the nervous system on which the sense of sight depends, and uses specific models to explain the effects and potential of plasticity both in growing individuals and in adults.

Research techniques involve multidisciplinary skills (biochemical, biological-molecular and cellular, electrophysiological, anatomical, behavioral and imaging) and the Laboratory has recently shown that some operations, for

instance, the removal of specific components of the extra-cellular matrix, can remedy damage to the central nervous system and, consequently, stimulate sight. Another interesting development of the Laboratory's research is the finding that sight recovery can occur even when the eye is neither stimulated nor used.

NEST Laboratory - National Enterprise for nanoScience and nanoTechnology

Director: Prof. Fabio Beltram

Location: "Complesso San Silvestro", piazza San Silvestro, 12

Info: info@nest.sns.it / www.nest.sns.it

The NEST — acronym for *National Enterprise for nanoScience and nanotechnology* — is a multidisciplinary research and teaching center, where teams of physicists (theoretical, experimental and computational physicist), chemists and molecular biologists work together to investigate phenomena at the nanometer scale, that is with sizes on the order of one millionth of a millimeter. The knowledge developed is also applied to the design of innovative nanobiotechnological devices and innovative photonic and optoelectronic architectures and devices.

NEST was co-created in 2001 by the Scuola Normale Superiore and the Istituto Nazionale per la Fisica della Materia (National Institute for Condensed Matter Physics), and it

incorporated the pre-existing physics laboratory at the Scuola Normale.

NEST research interests range from the physics of semiconductor and superconductor nanostructures, with the study of their electronic, optical and photonic properties, to the study of biophysical processes in living cells and tissues, in order to bring knowledge of these molecular processes to the extreme resolution limit of a single molecule. A key feature of NEST activities, typical of nanoscience, is its unified methodological approach in research fields that are so varied and belong to traditionally distinct branches of science.

Molecular Biology Laboratory

Director: Prof. Arturo Falaschi

Location: Institute of Clinical Physiology of CNR, via G.

Moruzzi, 1

Info: a.cereseto@sns.it /

www.sns.it/it/laboratori/laboratoriscienze/biologiamolecolare

The Molecular Biology Laboratory works within the broader framework of the study of living beings at the level of molecular mechanisms, with a main focus on three projects: the molecular aspects of HIV infection (the agent that causes AIDS); the process of regulation of human genome replication; methodologies for gene therapy.

As far as the first project is concerned, the laboratory deals with the study of molecular mechanisms responsible for the development of AIDS, through the spread of the virus in infected cells, with a specific focus on the DNA characteristics of the virus and its integration with the DNA of healthy cells. This project is carried on using a combination of methods typical of molecular biology and high-sensitivity and high spatial resolution optical nanotechnologies. As for the second project, the laboratory is working on the identification of the proteins that initiate cell replication processes. The same project also studies protein-protein and protein-DNA interactions, which underlie these processes, and the details of the involved molecules. A multidisciplinary approach is used, which includes methods ranging from genetics to molecular biology, from proteomics to the aforementioned nanotechnologies. Finally, in the field of gene therapy, the laboratory aims at identifying conditions and methodologies for the integration of external DNA fragments in human genomes and studies the use of the spreading of viruses.

Ennio de Giorgi Mathematical Research Center

Director: Prof. Mariano Giaquinta

Location: “Collegio Puteano”, piazza dei Cavalieri, 3

Info: crm.sns.it

The aim of the Ennio de Giorgi Research Center is the creation of an environment suitable for the development and spread of ideas in all the fields of pure and applied mathematics, with a particular attention to interdisciplinary aspects.

The main fields of research of the Center are five:

Holomorphic dynamical systems and arithmetic;

Evolution of Interfaces;

Measurement of theoretic aspects of partial differential equations;

Probability in Information Science;

Quantum Information.

The Center was co-created in 2002 by the Scuola Normale, the Scuola Sant'Anna and the University of Pisa, and it hosts workshops, courses and intensive research periods.

In order to enable young researchers to take part in these activities, the Center provides grants and fellowships (225 in the past five years). The “Junior Visiting Positions” project is particularly important in the life of the Center; thanks to this project, young and worthy students can stay at the Center for a period of 12 to 24 months to carry out their research. In addition, there is a similar project for already established mathematicians, who are invited to hold annual series of lectures and seminars at the Center.

Every year the Center organizes a series of meetings entitled “Mathematics, Culture and Society”, aimed at attracting the general public to mathematics topics and at investigating the



relationships between mathematics and other branches of learning.

Since 2003, the Center has been part of ERCOM (European Research Centers on Mathematics), which links the main European centers for mathematical research.

Research Group in Astrophysics

Contact professor: Prof. Mario Vietri

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: vietri@sns.it

www.sns.it/it/laboratori/laboratoriscienze/astrofisica

The activity of the Research Group in Astrophysics is devoted to the study of the physical processes of interaction between radiation and matter. In particular, research concentrates on high-energy theoretical astrophysics, i.e., on gamma- and X-ray sources in space.

Research mainly concerns Ultra High Energy Cosmic Rays (UHECRs) and Gamma Ray Bursts (GRBs). As far as UHECRs are concerned, the group is working on a new formulation of Fermi's theory of charged particle acceleration near shocks of any kind. It studies the modifications required in case of spherical symmetry in hyper-relativistic shocks, and the stability of Newtonian shocks when the pressure of non-thermal particles is not negligible. As far as GRBs are concerned, the Scuola Normale is at the leading edge for black



hole accretion from a high-density partially neutronized disk and for the study of GRBs as cosmological distance indicators. The group collaborates with the Observatory of Arcetri and with scholars from the Universities of Princeton and Naples.

Research Group in Elementary Particle Physics

Directors: Prof. Lorenzo Foà, Prof. Italo Mannelli

Location: Pisa Section of the Institute of Nuclear Physics (INFN), Building C – “Fibonacci” Center - Largo B.

Pontecorvo, 3

Info: lorenzo.foa@sns.it

www.sns.it/it/laboratori/laboratoriscienze/fisicapart

The Research Group in Elementary Particle Physics aims at observing and interpreting the physical processes of the fundamental matter constituents at a sub-nuclear level. More specifically, the research group focuses on the study of elementary particles, such as quarks and leptons. The study of the interactions between these particles can only be carried out in laboratories equipped with cutting-edge devices, such as high-energy positron and proton and/or electron accelerators. These technologies allow the group to explore, on a very small scale, conditions similar to the ones that existed a few instants after the Big Bang. The experimental activities of the theoretical physics research groups of Scuola Normale focus on two main areas:

the first area concerns the study of the interactions among the constituents of high energy matter and uses state-of-the-art technologies, such as the aforementioned accelerators; the second area concerns a series of experiments investigating the origin of the violation of the symmetry between matter and antimatter, the phenomenon that generated the universe, assuming that, if this violation had never occurred, the amount of antimatter produced would have been equal to that of matter and the resulting reciprocal annihilation would have left just light, but neither celestial bodies nor living beings.

Research Group in Calculus of Variations and Geometric Measure Theory

Director: Prof. Luigi Ambrosio

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: l.ambrosio@sns.it / <http://cvgmt.sns.it>

The group studies different problems of non-linear analysis with techniques of calculus of variations and geometric measure theory. The most recent results of the group in this field include the theory of optimal transport, the well conditioning of hyperbolic equations with irregular data, generalized graphs and their peculiarities, the problems of parabolic evolution (for measure, surfaces, harmonic maps, in metric spaces), and geometric measure Theory in metric spaces.



Furthermore, from a more abstract point of view, the group is interested in developing geometric measure theory techniques in fields that are also far from the Euclidean field (even on a local scale) and in particular in sub-Riemannian type spaces.

Research Group in Harmonic Analysis

Director: Prof. Fulvio Ricci

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: f.ricci@sns.it

www.sns.it/it/laboratori/laboratoriscienze/armonica

The Research Group in Harmonic Analysis studies the representation of functions as an overlap of elementary waves. The research activity of the group includes different aspects of Fourier analysis in classical fields, such as convolution operators, Fourier multipliers and singular integrals and aspects of non-commutative harmonic analysis, in particular in nilpotent Lie groups and on symmetrical spaces, with applications to complex analysis and to the equations of partial derivatives. The group is interested in the following research areas: convolution operators, singular integrals, maximal operators, Fourier multipliers; LP-improving phenomenon, LP-boundedness of generalized and singular Radon transforms; Fourier analysis on the Heisenberg group and on nilpotent Lie groups;

invariant differential operators on Lie groups: local solvability and LP-boundedness of spectral multipliers; methods of commutative and non-commutative Fourier analysis in complex analysis: spaces of holomorphic functions on symmetric Siegel domains, boundary values and estimates for Bergman projectors.

Research Group in Infinite Dimension Analysis

Director: Prof. Giuseppe da Prato

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: daprato@sns.it

www.sns.it/it/laboratori/laboratoriscienze/dimeinfinita

The research project of the group concerns Kolmogorov equations in Hilbert spaces. Kolmogorov equations are a set of second-order elliptic and parabolic equations in a Hilbert space. Compared with traditional theory, Kolmogorov equations are characterized by the fact that the coefficients of the differential operators under consideration can be unlimited and quite irregular. Furthermore, during their study, much attention is paid to the connections with differential stochastic equations.

There are a number of reasons to study Kolmogorov equations, for example:

a natural mathematical interest in extending classical results without assuming the usual hypotheses of regularity and limit

in the coefficients;
the possibility of using obtained results to study partial derivate stochastic equations and associated control problems;
the possibility of applying obtained results to mathematical models within various fields, such as economics and finance, fluid dynamics (in particular, turbulence), population dynamics, statistical mechanics and field theory (stochastic quantization).

Research Group in Theoretical Physics

Contact Professor: Prof. Riccardo Barbieri

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: barbieri@sns.it

www.sns.it/it/laboratori/laboratoriscienze/fisicateorica

The interests and research areas of this group are subdivided into three main fields:

Elementary Particle Physics. The group is interested in potential modifications to the theoretical description of the interactions between elementary particles in the light of the experiments about to be performed at Large Hadron Collider in Geneva. The Laboratory contributes by suggesting possible models and examining their phenomenological consequences.

Cosmology and Astroparticle Physics. The modern view of the physics of fundamental interaction is a highly integrated

approach of cosmology, astrophysics and elementary particle physics. In this general framework, the group is mainly interested in the problems of the interpretation of matter and dark energy in cosmology and in their possible implications for the physics of elementary particles.

Theory of Fields, Strings and Gravity. Nowadays, the theory of strings is a conceptual framework for the unification of the fundamental interactions with gravity, potentially able to combine it with quantum mechanics. The activity of the research group is aimed at explaining the contents and the meaning of the theory and gaining a better understanding of vacuum in the presence of supersymmetry breaking, a key element in linking the theory of strings to the physics of elementary particles.

Research Groups in Condensed Matter Theoretical Physics:

Quantum Transport and Quantum Information

Director: Prof. Rosario Fazio

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

The research activities of the group are developed within the field of quantum transport, solid state quantum computation and theory of quantum information.

Electronic States and Optical Transitions in Solids

Director: Prof. Giuseppe La Rocca

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

The group studies the exciton physics, spin-orbit coupling in



semiconductors, coherent optical nonlinearities and atom optics.

Theory of Quantum Fluids

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

The group performs research activities in the study of coherent quantum matter and of the correlations in low-dimensional electronic systems.

Research Group in Diophantine Geometry

Director: Prof. Umberto Zannier

Location: Palazzo della Carovana, piazza dei Cavalieri, 7

Info: u.zannier@sns.it /

www.sns.it/it/laboratori/laboratoriscienze/diofantea/

The research area of this group falls within the field of the theory of numbers, and it concerns the application of geometric methods to the study of Diophantine equations. They derive their name from Diophantus from Alexandria, who tried to find rational solutions to problems leading to multiple-variable equations in the III century A.D.

Research areas of the group are:

Integer points on curves and other algebraic varieties: problems of finiteness and parameterization of the points of interest.

Application of Diophantine approximation techniques, in particular Schmidt's subspace theorem.

Diophantine equations on number and function fields. Issues of effective determination of the solutions.

Height of algebraic points on sub-varieties of group varieties.
 Linear dependence of points on sub-varieties of group varieties;
 connected problems of intersections of fixed sub-varieties with
 algebraic sub-groups in suitable families (e.g. those of a given
 dimension).
 Irreducibility of polynomials on number fields and function
 fields; analogues of the Bertini Theorem for algebraic groups.
 Issues about Hilbert's Irreducibility Theorem.

Research Group in Dynamic Systems

Director: Prof. Stefano Marmi
 Location: Palazzo della Carovana, piazza dei Cavalieri, 7
 Info: s.marmi@sns.it /
www.sns.it/it/laboratori/laboratoriscienze/sistemidinamici

The group deals with the study of dynamic systems, that is the
 mathematical models expressing the variation of a state in time.
 In this field, the research interests of the group focus on the
 holomorphic dynamics in one or several complex variables,
 small divisor problems, continued fractions and measured
 foliations.

The group is also involved in the organization of seminars on
 dynamic systems at the Ennio de Giorgi Mathematical Research
 Center.

Current research projects concern:

Dynamics of holomorphic maps in several complex variables in



a neighborhood of a non-hyperbolic fixed point;
 Arithmetical conditions and solutions of cohomological
 equations for interval exchange transformations;
 Ergodic theory and developments in continued fraction;
 Phase transitions in spin hierarchical lattices and holomorphic
 dynamics of the renormalization group.

Research Group in Complex Analysis and Analytical Geometry

Director: Prof. Giuseppe Tomassini
 Location: Palazzo della Carovana, piazza dei Cavalieri, 7
 Info: tomassini@sns.it /
www.sns.it/it/laboratori/laboratoriscienze/anacompl

The group deals with research in the fields of complex analysis,
 analytical geometry and geometry of CR varieties. The group
 studies Levi-flat varieties and their associated non-linear
 problems. The research activity also focuses on holomorphic
 envelopes, the problem of Levi and the structure of weakly
 pseudo-complete complex spaces.

The main research areas are:

existence of holomorphic chains and Levi-flat hypersurfaces
 with assigned boundary, in the context of complex structures
 and, more generally, in the context of quasi-complex structures;
 existence of Levi-flat hypersurfaces with a partly-assigned
 boundary;
 Geometric structure of weakly complete complex spaces;

existence of the envelope of holomorphy for open complex
 spaces and the problem of Levi;
 evolution of compact subsets of C^2 and CP^2 by Levi form

Research Group in Algebraic Geometry

Director: Prof. Angelo Vistoli
 Location: Palazzo della Carovana, piazza dei Cavalieri, 7
 Info: angelo.vistoli@sns.it /
www.sns.it/it/laboratori/laboratoriscienze/geometrialgebrica/

The research area is geometry of algebraic varieties, in particular
 moduli theory (algebraic stacks, curves and Abelian varieties).

The group carries out research in:

Theory of algebraic stacks
 Algebraic intersection theory
 Stable maps
 Actions of algebraic groups, equivariant K-theory, equivariant
 Chow rings, equivariant cohomology
 Geometry of affined spaces, polynomial maps
 Moduli spaces of vector bundles on algebraic curves and
 projective spaces
 Moduli spaces of Abelian varieties. Abelian and non Abelian
 theta functions
 Geometry of algebraic and Jacobian variety of curves
 Osculating variety of curves and algebraic surfaces and their
 degeneration



7_FACILITIES

1. Administration Structures

1.1 Student Services Division

Palazzo del Castelletto, via del Castelletto 11. Open Monday through Friday: 9 a.m. – 1 p.m. and 3 p.m. – 5 p.m. All students – undergraduate, doctoral and grant holders – can refer to the Student Services Division for any matter concerning their studies at the Scuola Normale.

Among the main services, it provides information and communication concerning the notices of competition for admission to undergraduate and doctoral programs; it receives and manages the documents related to the programs, such as plans of study and certificates; it manages the recording of the exams and of the annual colloquia; it is in charge of tuition fee reimbursements; it provides information and communications on fellowships and student mobility and on post-degree and post-doctoral grants and degree awards; it provides counseling and assistance to the students in submitting their plans of study and in applying for study and research periods abroad, as well as the issuance of certificates and diplomas.

For further information please contact:
segreteria.studenti@sns.it /Tel.: 050 509237

1.2 Academic Faculties Administration Offices

The Faculty of Arts Administration Office is on the first floor of

Palazzo della Carovana. It is open Monday through Thursday from 9 a.m. to 5.30 p.m. and on Fridays from 9 a.m. to 2 p.m.

The Faculty of Sciences Administration Office is on the third floor of Palazzo della Carovana. It is open Monday through Friday from 9 a.m. to 5.30 p.m.

The offices support the administrative and institutional activities of the Faculties. They coordinate the work of the Deans of the Faculties, by dealing with the administrative and logistic aspects of organizing teaching and cultural activities, seminars and conferences. Furthermore, they manage the applications for external research grants.

For further information please contact:

Faculty of Arts
segreteria.lettere@sns.it
Tel: 050 509296

Faculty of Sciences
segreteria.scienze@sns.it
Tel: 050 509203

2. Computing Center – CEIC

CEIC, the Computing and Information Processing Center, acquires, organizes and manages shared data-processing



resources of the Scuola Normale. The Center is located on the ground floor of Palazzo del Castelletto, in via del Castelletto 11, near Piazza dei Cavalieri.

The operating systems running on the personal computers available are Linux, Windows and Macintosh. The Center further provides centralized services, such as the e-mail, scientific computation, web services, database, library catalogue, data-processing systems for the administration and the student services division on Linux and Windows servers.

In the dormitories of the Scuola Normale students can access dedicated rooms, equipped with computers running Windows, Linux and Macintosh, 24-hours a day.

When students enter the Scuola Normale, they are given an individual e-mail account and the Computing Center can activate the internet connection in individual student rooms. The technical staff of the Center can provide software and computer-based solutions for educational activities and research projects.

Any request or problem report is managed through the Help Desk, available by phone at 050 509340 or 3409700858 (active only when the Help Desk technicians are busy in external activities).

For further information please contact:
<http://ceic.sns.it> / segr_ced@sns.it



3. Buildings

Scuola Normale organizes its activities within buildings of great historical and architectural value, most of which overlook Piazza dei Cavalieri, in the heart of the town of Pisa.

Palazzo della Carovana

It houses the main premises of the Scuola Normale. The building is located along the northern side of Piazza dei Cavalieri and houses the head offices of the Scuola, the lecture halls, the offices of the professors, the administration offices of the Faculties and the periodical section of the Library of the Scuola. The project of the present building, by Giorgio Vasari, dates back to 1562: Vasari unified pre-existing buildings from the 12th Century – among them, the former premises of the Council of Elders of the Republic of Pisa – into a single structure. From 1564 it was the residence of the Knights of the Order of Saint Stephen, who were once trained there in the art of war, as well as the sciences.

Reception 050 509280

Palazzo dell'Orologio, also known as Palazzo della Gherardesca

The Palazzo dell'Orologio, next to Palazzo della Carovana, houses the main part of the Library of the Scuola, in particular the Humanities section. The building encloses two pre-existing towers, connected by a vault: the right-hand tower is known as the Tower of Hunger, due to the tragic death of Count Ugolino recounted by Dante in Canto XXXIII of the *Inferno*. The building is accessed through an underground

passageway from the ground floor of Palazzo della Carovana.
Reception 050 509205

Palazzo del Capitano

The Palazzo del Capitano, along via Ulisse Dini, houses part of the Library of the Scuola Normale: on the ground floor, the sections of Art History and rare and antique books; on the second and third floor, the section of Sciences and some administrative offices. This building is accessed from via del Castelletto.

Reception 050 509700

Palazzo del Castelletto

The Palazzo del Castelletto houses the administration offices of the Scuola Normale, the Computing Center, and a 170-seat conference room named after the mathematician Ulisse Dini. The building also houses the Associazione Normalisti and the Amici della Scuola Normale.

Reception 050 509868

Collegio Puteano

Founded in 1604, it is the only building surviving from the original system of university residences in Pisa. It currently houses Scuola Normale guest rooms, the Ennio De Giorgi Mathematical Research Center, and two lecture rooms are used for the internal lectures and seminars of the Scuola Normale. The building is in Piazza dei Cavalieri.

Reception 050 509368

Compendio San Silvestro

The set of buildings called Compendio San Silvestro, in Piazza San Silvestro, was the first home of the Scuola Normale Superiore during the Napoleonic period. In 2002 it was allotted to the Scuola Normale for free and perpetual use by the State Property Agency. The whole structure has been intensely renovated with the contribution of Fondazione Monte dei Paschi di Siena and now houses the new premises of NEST Laboratory and a dormitory for the students of the Scuola Normale.

Reception 050 509488

Palazzo della Canonica

It is home to the Interdisciplinary Center for the Research, Planning and Management of Cultural Heritage and is planned to house part of the ever-growing Library of the Scuola Normale, in particular the collections donated to Scuola. Among the most recent ones, there are the donations by Clifford Truesdell, Sebastiano Timpanaro, Ettore Passerin d'Entreves, Cesare Luporini, Vittore Branca and Eugenio Garin.

Palazzone di Cortona

The Palazzone is a Renaissance villa in Cortona (Arezzo) donated to Scuola Normale by Count Lorenzo Passerini in 1968. It houses a center for academic activities, conferences and the orientation courses of the Scuola Normale. Some

rooms were frescoed by Luca Signorelli and by Papacello.

Reception 050 509399

Conferences secretariat 050 509398

Dormitories

Each undergraduate student is granted an en-suite single room in one of the dormitories of the Scuola Normale. Each room is equipped with Internet connection and a telephone for internal and external calls.

Collegio Domenico Timpano

Formed by three interconnected building components (Timpano, Timpanino and Acconci), it can house up to 120 students and grant holders. A computer room, a laboratory of physics, study rooms and recreational spaces (including a garden) are available for the students. The dormitory has been open since 1959 and is located at Lungarno Pacinotti No. 51.

Reception 050 509500

Collegio Alessandro D'Ancona

Named after the man of letters Alessandro D'Ancona, this dormitory houses 54 students. Besides the bedrooms, a reading room, a TV room and a music room are available for the student. It houses the cafeteria of Scuola Normale. The dormitory is accessed from Consoli del Mare No. 3.

Reception 050 509210

Collegio Enrico Fermi

Housing 46 students, it is the smallest of the Scuola Normale dormitories. Lecture rooms and recreational spaces are available for the students. The dormitory is in via S. Apollonia No. 29.

Reception 050 509800

Collegio Giosue Carducci

It opened in 1995 and houses up to 91 students. Fully equipped shared facilities are available, such as a billiard and table tennis room, a gym room, a projector room, a music room, a computer room, a laundry room and some study rooms. The offices for the Nutritional and Psychological Counseling Service provided by the Scuola Normale are in this building as well. The dormitory is in via Turati No. 15, not far from the railway station.

Reception 050 509999

Collegio Alessandro Faedo

Opened in 2006, it is the most recent dormitory of the Scuola Normale, purchased and managed in cooperation with the Scuola Superiore Sant'Anna. The building houses 83 students of the Scuola Normale and the same number of students of the Scuola Sant'Anna. Recreational spaces, study rooms, a gym room, a projector room, a computer room and a music room are available for the students. The dormitory is in via del

Giardino No. 3.

Reception 050 508800

4. Associations and Foundations

Conservatorio Santa Chiara Foundation

The Conservatorio Santa Chiara in San Miniato became a foundation in April 2006, with the aim of supporting the many activities of the Scuola Normale in academic and teaching fields. The spacious building housing the Foundation is of great historical value: first a Clarisse convent and a boarding school for girls, since the mid 1990s it has housed the Santa Chiara Museum. It is equipped with twenty-five rooms, a cafeteria and conference rooms of several dimensions. It can house up to 50 people.

Via Roma, 15 - San Miniato (Pisa)

Reception 0571 43050

Associazione Normalisti (Scuola Normale Association)

Founded in 1997 by a promoting committee headed by Prof. Alessandro Faedo, the Associazione Normalisti currently has more than 600 members (alumni, current students, researchers and professors), who work or are still working within the Scuola Normale Superiore. The Association is directed by Prof. Franco Montanari.

Tel.: 050 509501

Amici della Scuola Normale (Friends of the Scuola Normale)

The Amici della Scuola Normale is a free partnership among institutions and companies, created in 1990 with the aim of promoting innovative activities involving the Scuola Normale. The association promotes activities within different fields, to develop a permanent connection between the world of business and economy and the Scuola Normale, between applied research and pure research. It is directed by Antonio Maccanico.

Tel.: 050 509654

Fondazione Giorgio Pasquali

Housed in the main premises of the Scuola Normale, the Giorgio Pasquali Foundation offers annual fellowships for doctoral students of philology, archaeology and classical history. It was founded in accordance with the will of Mrs. Maria Nosei, widow of Giorgio Pasquali, professor at the Scuola Normale from 1930 to 1952. It is headed by Salvatore Settis.

Tel.: 050 509040

Fondazione Collegio Puteano

The Puteano College was founded on 8 December 1604 by the Archbishop of Pisa, Carlo Antonio Da Pozzo, with the aim of providing young needy Catholic students with the necessary economic means to attend the University of Pisa. The Foundation pursues the project of its founder by offering two fellowships every year. It is headed by Pietro Pietrini.

Tel.: 050 2213615

Fondazione Sansone

The Emma and Giovanni Sansone Foundation was established by will of Prof. Giovanni Sansone, who was a student of the Scuola Normale from 1906 to 1910 and then professor of mathematics there. The Foundation is housed at the Scuola Normale, and its aim is to grant doctoral fellowships to young postgraduate students of mathematics. It is headed by Salvatore Settis.

Tel. 050 509215





8_CULTURAL ACTIVITIES

1. Edizioni della Normale

The Scuola Normale has always combined its teaching and research activities with an extensive and significant publishing activity, first of all the *Annals* of the two Faculties. Since 2003, the publishing activity of the Scuola has been reorganized on several levels, by establishing a modern publishing center, by redesigning the graphics of the series, and by rethinking its network of collaborations and its target public.

Scuola Normale's publishing center, Le Edizioni, publishes the academic activity of the two Faculties, but is also open to works by external scholars. Its publications are designed to address the wider educated public, by dealing with themes and problems ranging from the ancient world to contemporary culture in all the varieties of its aspects – from the arts to the sciences, from philosophy to literature.

The publications are organized in a series of collections: Studi, Testi e commenti, Opere di Tommaso Campanella, Carteggi, Seminari e convegni, Biblioteca, Forme, Strumenti, Lezioni, Appunti, Quaderni, Tesi, CRM Series, Colloquia.

Besides traditional publishing, the staff of Le Edizioni is also interested in on-line publishing, working in synergy with SIGNUM, the Center for Computer-Based Humanities Research, to experiment with new methods for book consultation.

The catalog includes over three hundred titles and can be consulted on-line at the following address:
www.sns.it/it/edizioni/catalogo.

For further information, see: edizioni@sns.it; Tel. 050 509220/509892.

2. I Venerdì del Direttore

I Venerdì del Direttore — Guest Speakers on Friday Afternoons — is a series of public conferences, generally held on Friday afternoons, organized with respect for the spirit of dialogue typical of the Scuola Normale. Outstanding figures from the intellectual, scientific, economic, political or literary worlds dialogue with students and professors of the Scuola Normale and the citizenship of Pisa on current topics. Among the guests of recent editions: Giuliano Amato, Franco Battiato, Ezio Mauro, Gao Xingjian, Corrado Passera, and Francesco Rosi.

3. Seminars, Conferences, *ilcontesto*

The Scuola Normale offers its students, researches, professors and the city of Pisa a variety of cultural activities, oriented to a broad non-specialist audience and pertaining to a wide range of fields and to the world of music.



Symposia

The Scuola Normale opens its academic year with a day of conferences and debates on 18 October every year in memory of the anniversary of its foundation by Napoleonic decree on that date in 1810. The day is organized in turn by one of the two Faculties and ends with a classical music concert which marks the opening of the concert season of the Scuola Normale.

Series of Seminars by External Professors

During the academic year, the Faculty of Arts and the Faculty of Sciences organize series of seminars on both specialized and more popular topics by professors external to the Scuola Normale. Presented by outstanding figures from university, research and cultural areas, the seminars are oriented not only towards the students and professors of the Scuola Normale, but to a broader audience of scholars and thinkers. Other events, conferences and days of study, such as the *Lezioni Fermiane*, *Lezioni Comparesottiane* and *Cattedra Galileiana*, are organized in collaboration with prestigious institutions.

The Students' Forum

The Students' Forum grew out of the desire of a group of students to take part in the cultural life of the Scuola Normale, to reflect on the present-day situation and to approach the world of work. Its activity mainly consists in the organization of



public meetings with outstanding personalities, chosen and invited for their expertise within various fields of interest. They are not traditional conferences, but rather an open discussion between the guests and the audience. Meetings pertain to three main areas: Education and Research; Economics and Development; Art and Communication.

Mathematics, Culture and Society

Every year, the Ennio De Giorgi Mathematical Research Center organizes an annual lecture series on *Mathematics, Culture and Society*, a series of meetings aimed at encouraging an exchange between the world of scientific research and the rest of society. The purpose of these meetings, which are characterized by the variety of subjects dealt with, is to reveal the way in which mathematics is involved in many, even unexpected, disciplinary fields and in everyday life. The lectures are held in the Aula Dini, a conference hall in Palazzo Castelletto.

The Colloquia of the Faculty of Sciences

The Faculty of Sciences organizes monthly meetings with internationally renowned experts, pertaining to topics of general interest within the fields of biology, chemistry, physics and mathematics. Their aim is to provide some occasions of meeting and discussion to students, grant holders, visiting students, researchers, professors and everyone else who is interested in participating.

SIGNUM Seminars

Every year, SIGNUM, the Center for computer-based humanities research, offers a series of seminars, investigating topics related to the application of computer science to humanities. These meetings are generally held in the Aula Bianchi lecture hall at Scuola Normale.

ilcontesto

ilcontesto is a journal of cultural, social and political critical analysis. It was founded in 2003 by students of the Scuola Normale and is published by Ets. The journal promotes a cultural exchange between humanities and sciences, on topics such as publishing, war, law and Europe.

4. I Concerti della Normale

In the panorama of regional and national concert seasons, the Concerts of the Scuola Normale have attracted particular attention thanks to the wide variety of genres explored and their stylistic experimentation. Every year from October to June the Scuola Normale offers its students, professors and all interested music lovers an intensive program of musical events and orchestral interpretations by some of the most talented groups, soloists and directors on the contemporary scene.



Music entered the Scuola Normale in a period when the practice of universities organizing concerts was practically unheard of in Italian.

The idea came from Gilberto Bernardini, Director of the Scuola Normale, who worked together with Maestro Piero Farulli to organize the first concert season in 1967. Under the management first of Piero Farulli, then of Andrea Mascagni and, most recently, of Carlo De Incontrera, the concert season became a traditional element of the cultural activities of the Scuola.

Over its forty years of activity, the Concerts have brought to Pisa both internationally famous and young talented artists, offering space as well to Medieval, Renaissance and Baroque music, and to repertoires of modern and contemporary composers.

Musical Activities at Scuola Normale

Since 1967, the Scuola Normale has encouraged musical culture and the passion and appreciation of its students for music through different activities.

Music Lectures

The Music Lectures integrate concert activity with theory, performances and short series of concerts. Famous

international Maestros are invited to hold lectures that have recently taken the form of proper monographic seminars in the Aula Bianchi lecture hall of the Palazzo della Carovana.

The Vincenzo Galilei Chorus

The Vincenzo Galilei Chorus was founded in 1973 by Maestro Piero Farulli. Its repertoire ranges from Renaissance music to the music of the twentieth century, from a *cappella* to symphonic-choral performances. Nowadays composed of more than 60 members counting singers and musicians, at the beginning of each academic year it opens the selections to new Scuola Normale students. The Association has its premises within the Scuola Normale Superiore.

Musical Intervals

The Musical Intervals are series of concerts organized and performed by the students. They are held in Aula Bianchi and allow students from within and external to the Scuola to perform before an audience of young music lovers. Every year, a student is elected to organize and manage the event.

For further information please contact:

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9_APPENDIX: HISTORICAL OUTLINE

The Scuola Normale Superiore was founded in 1810 by Napoleon I, as twin institution of the École Normale Supérieure in Paris, itself dating back to the French Revolution jurisdiction: the aim of these “Schools” was to offer specialized programs for the training of teachers. The term “École Normale” (“Scuola Normale”) was coined by Joseph Lakanal who, in submitting a report to the National Convention of 1794 on behalf of the Committee of Public Instruction, explained it as follows: “Normales : du latin norma, règle. Ces écoles doivent être en effet le type et la règle de toutes les autres”. Students had to study not only academic subjects, but also and especially how to communicate and teach them to young citizens.

The Decree of Foundation

Napoleon rethought the project of an École Normale in 1808, by establishing a “Normale” hall of residence in Paris, to house young students and train them in the art of teaching the humanities and sciences. The project was replicated in Tuscany by a decree dated 18 October 1810, with the foundation in Pisa, seat of one of the Imperial University Academies, of a branch of the École Normale Supérieure in Paris, called the Scuola Normale Superiore.

The first competition for 25 students was announced in February 1811 with a deadline at the beginning of September, but it was not until 1 November 1813 that the Scuola Normale in Pisa truly started its activities by enrolling its first arts and sciences students



and establishing disciplinary regulations for its dormitory, first located in the Convent of San Silvestro. The Scuola Normale was reserved to the most worthy students, selected after their secondary-school programs. The students would receive their degrees from the Faculty of Arts or the Faculty of Sciences of the Imperial University and their teaching diploma from the Scuola Normale. After having undergone these training activities, the students would work as secondary schools teachers for at least ten years.

The Grand-Duchy Period: 1847-1859

When, in 1814, Grand Duke Ferdinand III returned to Tuscany, the project of a Scuola Normale in Pisa ceased. Only at the beginning of the 1840's, in connection with the university reform of 1839-1841, the project of an institution aimed at training secondary school teachers was resumed. The question was combined with the proposals of resumption of the educational activities of the ancient Order of Saint Stephen, whose main premises were within the Palazzo della Carovana in Pisa. On 28 November 1846, a grand-ducal *motu proprio* founded a Tuscan Scuola Normale in Pisa (also referred to as the Imperial Royal Scuola Normale, since it was linked to the Austrian system), with both theoretical and practical aims, under the patronage of the Order of Saint Stephen, but depending on the University of Pisa. Ten full scholarships were available through a competitive examination, with preference given to members of the Order; further places were available by

payment of tuition fees. Features worth mentioning are the three-year course of studies, the great importance paid to the religious and disciplinary aspects of the life in the Scuola Normale, entrusted to the charge of a rector chosen from among clergymen, the professional orientation, as evidenced by the choice of the professor of pedagogy at the University of Pisa as Director of Studies; the right reserved to the philology and philosophy students of the Scuola Normale to be housed in the dormitories, whereas the physics and mathematics students were considered as “associate students”. The Scuola Normale opened in November 1847, in Palazzo della Carovana, and later bore the consequences of the 1848 university riots at the University of Pisa, from the expulsions of the short democratic period to the university counter-reformation in 1851.

During the grand-ducal period, the Scuola Normale was affected by the political climate of its time: enthusiasm for the Risorgimento was countered by reactionary and denominational attitudes for fear of subversive movements and riots. Nevertheless, the Scuola Normale took on a special role within the educational organization of Tuscany, proved by the fact that the exams to qualify as teachers took place in Pisa.

The Scuola Normale during the Kingdom of Italy: 1859-1862

Between 1859 and 1862, with some changes to its statute, due to the complex ongoing process of reorganization of the national school and university system, the Scuola Normale survived

mostly thanks to the work of the new men called to the University of Pisa at that time and thanks to important figures from the grand-ducal Scuola Normale, such as the pedagogue Pecchioli and the canon Sbragia. After a long debate concerning the organization of one or more universities structured according to the different models offered by the École Normale in Paris, by German seminars and by English colleges, an important reorganization of the Scuola Normale in Pisa occurred in 1862. After several project proposals, the Minister Matteucci implemented new regulations in a decree dated 17 October 1862. The program would last three years and the admission to the Scuola would occur through a competitive examination after the first year of university studies; there was to be an organic division into two Faculties, of Arts of Sciences, with the Arts students housed at the Scuola Normale; a more secular approach to teaching was encouraged, without any religious and denominational element. Admission exams could be sat at the six main universities of the Reign, which ensured a national hiring basis, even if for a limited number of students. With its unique role in the new national university system, the Scuola Normale became the place where a renewed intellectual elite was trained through unique forms of teaching, and promoted a new discipline, based on example, collaboration and emulation, in a framework of significant cultural and ideological open-mindedness, which was simpler to apply within a limited and selected community.



From 1863 to 1927

In 1863, the new Director of the Scuola Normale, Pasquale Villari, organized the extension of the program to four years. Furthermore, in the same period the University of Pisa added new chairs, also to support the role that the Scuola Normale had gained. Villari left the Scuola in 1865, and his place was taken by the mathematician Enrico Betti; from 1890 to 1900, the position of Director was filled by literature historian Alessandro D'Ancona, and from 1900 to 1918 by the mathematician Ulisse Dini. The new regulations, issued by Minister Coppino in 1877, reviewed and simplified the internal study regulations and equalized, from an organizational point of view, the Faculties of Arts and Sciences; moreover, the last two years at the Scuola were linked to the Schools of Education, i.e. to the subsidiary courses established in 1875-1876 within the Faculties of Arts and Sciences and aimed at the training of teachers. Teaching was carried on by private tutors as well as by professors of the University of Pisa working in the Scuola Normale; the figure of the “internal professor” of the Scuola Normale became typical only under the direction Gentile and afterwards. Further changes to the statute were introduced in 1895 and 1908 to strengthen the qualifying nature of the institution. The life of the Scuola suffered from material difficulties during the years of the First World War and in the post-war period, from the changes that occurred in the composition of the teaching staff of the University of Pisa and, more generally, in the intellectual climate of Italy. In 1918, Luigi Bianchi became the Director of the Scuola. The abolition in 1920 of the

Schools of Education within the universities resulted in some changes in the Scuola Normale regulations at the beginning of 1923. Minister Giovanni Gentile attempted to address some urgent financial needs, but was unsuccessful at assuring the Scuola Normale the permanent availability of doctoral fellowships, which were initially contemplated as internship positions and then officially established in 1927.

The Scuola Normale under Gentile: 1928-1943

Gentile, one of the protagonists of Fascist politics within the field of education, was placed at the head of the Scuola Normale as commissioner in 1928 and as director in 1932. He reacted to a situation of decadence by expanding the premises of the Scuola Normale, Palazzo dei Cavalieri, by increasing the number of scholarships available and of the internal activities, and by promulgating a new statute in 1932, which recognized the Scuola Normale as an advanced education institute with “a legal status and administrative, educational and disciplinary autonomy”. Gentile was able to consolidate the Scuola Normale thanks to the exceptional funds granted by Mussolini as well as provisions coming from the establishment around the University of Pisa of an inter-provincial university consortium in 1931. The relationship between State and Church, inaugurated by the Lateran Treaty, eased the negotiations with the archbishopric aimed at obtaining the use of Palazzo Puteano. This building, together with Collegio Timpano, was used to house the young students of the Scuola

Normale while the works to expand Palazzo della Carovana were carried on. Under Gentile, the Scuola Normale was closed to female students, who had become relatively numerous in the years around the war. Gentile tried to maintain a space of autonomy for the Scuola Normale, even though this autonomy was limited and even reduced by the statute in 1938. In policies and discipline and in his relationships with the students, he oscillated from tolerance to control. The fundamental aims were twofold: preparatory training for teaching and for the teaching qualifying examinations, and promoting a high scientific and literary culture. The Scuola Normale carried on its activity during Second World War, albeit with some limitations and practical difficulties. Gentile left the direction of the Scuola in August 1943.

Post-war Period: 1944-1963

In the months during which the fronts of World War II continued to change locations, the direction was entrusted to the mathematician Tonelli – who was especially involved in trying to materially safeguard the Scuola Normale, by defending the library and furnishings of Palazzo dei Cavalieri and moving the most important collections to the nearby Carthusian monastery in Calci. After the liberation of Pisa his place was taken by Luigi Russo, who was in charge until October 1948. During the post-war period, there were many practical difficulties; however, besides the restoration of Palazzo dei Cavalieri, it was decided to announce a competition for seventy scholarships for veteran or partisan students, with efforts to

raise awareness of the need for financial resources in addition to public funds and thus create a patrimony through donations and purchases. The replacement of Russo with Professor Ettore Remoti from Genoa by the Christian Democratic minister Gonella gave rise to discussions and disputes, in which, besides noticing the material improvements obtained by the Scuola Normale, the political nature of that succession was underlined. In 1952, the Scuola Normale was opened to female students again. Meanwhile, in 1951, it was formally involved in the establishment of the Antonio Pacinotti boarding school, reserved to students of the faculties of Agriculture, Economics and Engineering, with plans to be further opened to other faculties as well. The aim of the boarding school, whose structure was meant to be similar to the one of the Scuola Normale, was to train teachers in technical subjects and promote research in the field of applied sciences. The Director of the Scuola Normale would have headed the board of directors of the new boarding school as well, and the Scuola Normale was also involved in the administrative and disciplinary management of the medical and juridical boarding schools. Nevertheless, the new-born scientific boarding schools, originally planned to work alongside the Scuola Normale, did not succeed in finding an organic and lasting connection with it.

The present-day Structure

During the long directorship of Gilberto Bernardini, beginning in

1964, the present-day structure of the Scuola Normale began to emerge; this structure was ratified by a law dated 7 March 1967, which established the Scuola Normale Superiore for undergraduate and doctoral studies, initially dependent of the University of Pisa before obtaining full autonomy. The statute of 1969 explicitly defined the new educational framework and, beginning at the end of the sixties, the Scuola Normale strengthened its image as an institute for advanced education, with a great increase of the number of internal professors, the foundation and enhancement of research facilities and centers, and an increased number of undergraduate and doctoral students – also thanks to the law of 18 June 1986, which granted the *perfezionamento* diploma at the Scuola Normale equal status to the Doctor of Philosophy. Through its college life and its cultural interests, and the encouragement of the daily contact among young people, the Scuola Normale has always encouraged a continuous exchange of ideas and comparison of points of view, and favored the collaboration among young people from all over Italy and from different backgrounds. It has promoted educational activity; born with the aim of training teachers, it has gone beyond this task to become an institution for advanced specialization, known in Italy and abroad for its cultural activities and for the scholars who have been trained and have taught here. Over time, the Scuola Normale has increasingly opened up to society, and while remaining an elite institute, has offered its cultural activities and heritage to an ever-wider audience.



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