

To the first-year Students of the PhD in Statistical Physics, academic year 2024/2025

updated on 10/10/2024

Welcome to SISSA and to the PhD in Statistical Physics. The staff, the members of the faculty, the PhD students, all the other group members, and myself look forward to meeting you and to getting to know you individually.

These notes are meant to give you some useful information about scientific and logistic aspects of life in SISSA. Please take a moment of your time to read them carefully, and feel free to ask questions in the forthcoming **welcome meeting**, which will take place on **Wednesday, October 16th at 14:00 in room 138** (1st floor). Note that the **lectures** will begin on **Monday, October 14th in room 138**.

The Student's Wiki page http://wiki.sissa.it/students/index.php/Main_Page provides also useful information about life in SISSA.

For information about the PhD course in Statistical Physics (lecture, timetables, seminars, etc) you should always refer to the dedicated webpage of the group: <http://www.statphys.sissa.it> .

==== STARTING UP in SISSA ====

REGISTRATION – Upon your arrival in SISSA, please check-in immediately at the PhD Students Secretary in room 222 (2nd floor), in order to be registered, to have a SISSA account open, to receive the personal badge and additional instructions.

DESK – You will have a desk in room 126 (4 persons) and 127 (2 persons) for the first year (during which you will be mainly attending lectures). At the beginning of the second year, you will move to one of the smaller, quieter offices. Rooms 126 and 127 have enough workstations for all of you and sockets/cables are available for connecting laptops. In case of problems with connections or computers, hardware and software please contact helpdesk@sisssa.it .

COURSES/EXAMS – Lectures will start on **October 14th** and, unless otherwise specified, they will take place in room 138. The schedule of the courses will be available here: http://www.statphys.sissa.it/wordpress/?page_id=78, together with the announcements of upcoming seminars and journal clubs. The tentative list of

courses which will be offered during the academic year 2022/2023 can be found here: <http://www.statphys.sissa.it> under “PhD Program”. All these activities will continue until May-June.

Note that the schedule of the activities is progressively updated and is subject to occasional changes due to other commitments of the lecturers and of the students. Check frequently the group web pages to stay updated.

The lectures we offer cover a wide range of the most important topics in statistical physics and therefore you are required to attend **as many of them as you can**. Take advantage of this unique opportunity (probably the last of your career) to have someone available to teach you these subjects, also by asking questions and by participating actively to the lectures. At the end of the academic year, you will be asked a feedback on all the courses and also possible suggestions for future improvements. However, you are encouraged to point out immediately (to the lecturer or to the PhD coordinator) possible issues concerning the courses (lack of background, speed of the lectures, organization etc.).

You are required to pass the exams of various courses, following a “credit” system. In particular, you are required to:

- attend and pass the exams of **all** courses of **type “A”**
- attend **all** courses of **type “B”** and pass the exams of one or more of them, totaling at least 4 credits.
- attend **at least 4** courses of **type “C”** and pass the exams for a total of at least 5 credits.

The list of credits for each course as well as their classification can be found here: <http://www.statphys.sissa.it> under “PhD Program” (the page will be updated soon.) Exams of each course may consist of “homeworks” (exercises, essays, etc.) assigned during the course, of a final written/oral exam, or of a combination of the two. Ask each lecturer what the minimal requirements to pass the exam of the course are. Exams are usually scheduled upon agreement with the lecturer. We strongly encourage you to take the exam of a course as soon as possible after its conclusion and no later than the **end of June**. By the **September 15th** you must have passed all the required exams. Exams have to be registered by the lecturer on a register held by the Student Secretariat. In order to be admitted to the second year of PhD it is necessary that you have achieved a satisfactory level (as well as shown a satisfactory overall performance) in all the exams. In particular, the average of your marks should not be less than 27/30 and each single mark no less than 24/30.

Students have the option to define an individual study plan including

courses offered by other PhD curricula at SISSA. These plans need to be approved by the Coordinator of the PhD (Prof. Gesualdo Delfino).

As an integral part of the PhD training you are strongly encouraged to regularly attend the (free) English course, organized by SISSA (ask the Student Secretary for details) during the first and/or second year.

SEMINARS – The research group in Statistical Physics organizes seminars, journal clubs, etc. (some jointly with other institutions in Trieste area) providing an opportunity to learn about various current aspects of Statistical Physics and to share our research expertise. In particular, the group seminar is usually held on **Tuesdays at 11:00** either in room 128-129 at SISSA or in the “Stasi Seminar room” at the main building of ICTP (Miramare campus). Among the various activities, close to **February 20th** of each year, the group celebrates Boltzmann’s birthday with the Boltzmann Lecture, given by distinguished speakers. Check the calendar of activities for the actual schedule of seminars and lectures. All PhD students of the group **are requested** to attend and participate actively to these events as an integral part of their training. The list of upcoming seminars can be found in the weekly schedule at

http://www.statphys.sissa.it/wordpress/?page_id=78 .

In order to receive the seminar announcements and be updated about the activities of the group, please subscribe (as soon as possible after your arrival in SISSA) to the Statistical Physics seminars mailing list (which is jointly held with ICTP): https://lists.ictp.it/mailman/listinfo/cgi/statistical_physics_seminar.

Information about past seminars (including some videos) can be found here <http://www.statphys.sissa.it> under “Activities > Past Seminars”.

Some of these activities and seminars are held in hybrid form. However, your presence in person is strongly encouraged.

In case you are interested in, consider also subscribing to the mailing list:

- of the ICTP Condensed Matter group (which typically has seminars on Wednesday afternoon in the Stasi Seminar room in the ICTP main building): in order to do so, send a request to cm@ictp.it.
- of the SISSA Condensed Matter group:
https://lists.sissa.it/mailman/listinfo/cm_info

Keep also in mind that SISSA offers opportunities to learn about research in other subjects through SISSA Colloquia, interdisciplinary seminars, some of which organized by ILAS – Interdisciplinary Lab for Advanced Studies, and the lectures of the Master course in Science Communication (see the corresponding web pages for details): use these unique possibilities to broaden your knowledge. Please keep in mind that *participation to the **SISSA Colloquia** (organized by the Direction) is **mandatory** for all PhD students, independently of the specific sub-*

ject. The participation to other distinguished lectures (e.g., the Sciama Lecture) is also highly recommended.

RESEARCH - Before summer 2025, you are expected to talk to all the members of the Statistical Physics faculty (professors P. Calabrese, G. Delfino, A. Gambassi, G. Mussardo and E. Tonni) about possible projects for your PhD in view of the choice of your supervisor.

You are expected to start working on your PhD project after the end of the courses (concurrently with completing the exams which you decided to take). The whole PhD program is expected to last **at most four years**. In the spring of your second year (usually around end of March/April) you are required to present a **progress report**, i.e., a seminar to the group members during which you illustrate the progresses you made in your research project. This will be a relevant element for your admission to the third year of PhD. Depending on circumstances, during your third (and possibly fourth) year of PhD course you might be asked by the PhD Coordinator to report in informal journal clubs about your research. You are encouraged to share regularly, although informally, the progresses you make in your research with the members of the group and inform the PhD Coordinator of possible issues.

GROUP MEMBERS – The list of the current group members can be found at http://www.statphys.sissa.it/wordpress/?page_id=1684 .

We aim at being an integrated research community and we strongly encourage you to interact with the faculty, postdocs, visitors and other students (and also with colleagues in other research groups of SISSA). Interaction is a key resource in research and is invaluable for broadening your knowledge and developing new ideas as well as for getting specific help.

SECRETARIAL HELP – Contact the Student Secretariat (room 222) upon your arrival in SISSA, in order to be enrolled officially in the PhD program, getting the badge to access SISSA outside of working hours, keys of your office, open the email account etc., and subsequently for any general matters concerning administration and/or PhD fellowship. For questions and forms about missions (see below) send a message to areamission@sisssa.it or contact Ms. Federica Tuniz (internal phone number: 456).

STUDENT REPRESENTATIVES – There is one elected representative of the Statistical Physics PhD students in the Council of the Physics Area, currently Giacomo Bracci Testasecca (gbraccit@sisssa.it). There are also elected representatives for all the SISSA PhD students in the School Council, Board of Directors and Academic Senate, see the webpage: <http://students.sissa.it> . You can directly

contact them at the email address studentreps@sisssa.it. The statute of SISSA and other official documents regarding the School can be found at <https://www.-sisssa.it/administration> (some of them available only in their original Italian version though, momentarily).

SCIENTIFIC MISSIONS – We will try to provide financial support to your traveling for meetings, collaborations, conferences and summer schools; however, this must always be approved by your supervisor and by the PhD Coordinator, taking into account the group budget constraints. Whenever you plan to go on a mission – whether paid for by SISSA or not – you need to ask permission to *both* your supervisor and the PhD Coordinator at least **two weeks** before departure and you are requested to fill the official group calendar at <https://calendar.sisssa.it/SOG/>. If the mission is approved, at least **one week** in advance, you have to fill in the online mission forms that you find here <http://services.sisssa.it> under “Missions > Online forms”. Before starting a mission, please read carefully the rules about the eligible expenses that you find in the file linked right below the Online forms. If in doubt, please ask in advance to areamission@sisssa.it or contact Ms. Federica Tuniz (internal ph. number: 456).

Please, note that:

(a) for matters of insurance, you **must** fill in the mission forms even if you do not request any financial support to SISSA. *This is an important fact to remember.*

(b) any mission longer than 20 days has to be authorized by the Area Council and therefore you have to inform the PhD coordinator **at least two months** in advance.

(c) in case of a mission abroad longer than 30 days you are entitled to ask for a 50% increase of your monthly scholarship. Ask the Students Secretary in room 222 (2nd floor) and inform the PhD Coordinator **at least two months** prior departure.

First-year students are usually *not* allowed to go on a mission, especially during the courses or before having passed all the requested exams. Possible exceptions and special requests have to be discussed with the PhD Coordinator.

VACATIONS/ABSENCE – Any period of leave or absence beyond the periods of academic vacation, for whatever reason, has to be agreed upon with the PhD Coordinator during the first year and with the PhD Supervisor after it.

SISSA FACILITIES – Please use all SISSA resources with intelligence and honesty. A complete list them can be found in the School web page <https://www.sisssa.it/facilities-and-services>.

CAFETERIA – There is a cafeteria and a bar in SISSA (level 0), providing a range of food, from full lunches to sandwiches and salads. PhD Students have

the right to obtain the ARDIS card to get a discount on lunch prizes. The card can be obtained after paying the ARDIS tax from the ARDIS offices in town. To get some further discounts you will have to submit the following documents: a) a certification of the family composition; b) income and property declaration of your family (ISEE); c) fill in and print the form you can get at <http://www.ardis.fvg.it/>. The first two documents must be in Italian (or translated into Italian at the Tribunal, Foro Ulpiano 1). Please ask the student representatives for further details.

HOUSING – SISSA provides a free housing service, which can help you in finding accommodation in Trieste. All information on how to get assistance can be found on the SISSA web page at <http://www.sissa.it/housing> .

COMPUTING – A SISSA account will be created for you upon registration at the Students Secretariat, which you are requested to go to upon your arrival in SISSA. For computing needs, there is a Helpdesk provided by the SISSA Information Technology and Computing Services (ITCS). Please visit the webpage <http://itcs.sissa.it>. In case of problems with hardware/software/email etc., contact the Helpdesk at helpdesk@sissa.it with detailed, clear, constructive and polite requests for help. Keep in mind that there are students in the group that are in charge of providing support with computing needs and of managing the group webpage, whom you can contact at the address statphysweb@sissa.it for matters regarding computing-related problems within the group. Additional information about the ITCS facilities can be found on the SISSA web pages.

SISSA offers a financial contribution to first-year PhD students who want to buy a personal laptop – check the student's Wiki page or ask the Students Secretary (room 222) for details.

We strongly encourage all the students to create and maintain a personal webpage. Detailed instructions on how to do this can be found here: <http://people.sissa.it> .

LIBRARY – You will soon have a meeting with someone from the Library Staff who will explain the available resources and the formalities for accessing them. See also the SISSA Library website. **!**

FIRST AID/EMERGENCY/SAFETY – First aid is available within SISSA: contact any of the secretaries for information. To ask for first aid within SISSA premises, dial the internal phone number **911** (the number is also reported on the first-aid boxes that are located along SISSA corridors). If needed, the first aid team will redirect you to the medical service in SISSA building B4. In case of fire or of any other dangerous event, dial **555**. For any issue related to personal or collective safety while staying in SISSA, please contact safety@sissa.it .

COMMITTEE FOR THE WELLBEING (CUG) / PSYCHOLOGICAL COUNSELING – The PhD years can be rather stressful. If problems of any sort arise, do not hesitate to discuss them with your supervisor and/or the PhD coordinator. In case you feel you need professional support or counseling on a variety of issues (uneasiness, difficulties, discrimination, harassment, etc.), please contact the Committee for the Wellbeing (CUG) at cug@sisssa.it or visit <https://www.sisssa.it/cug> where you can find information of the various kinds of support you may receive as well as on the various actions to promote equal opportunities within SISSA. Psychological support (in Italian and English) is offered on campus by a team of psychologists, who can be contacted at sissacare@gmail.com for scheduling a meeting.

PHONE, MAIL and FAX – If you need to call outside Trieste for work, you will need to ask first the authorization from the PhD coordinator (and then call through the reception). You can send (ordinary) mail related to work through the SISSA mail office, marking any envelope with your name. Personal pigeons holes as well as outgoing-mail holes are located at level -1. A fax is available at the main building reception. A plotter, which can be used to print posters for conferences, is located in the post office area at level -1. See <http://www.itcs.sisssa.it/printing> for information on requesting a print.

STATIONERY – SISSA provides basic stationery items (pens, pencils, notepads, chalks, erasers etc.) in a limited amount: those available are listed at <http://www.adm.sisssa.it/store/>. If you need something from that list, send an e-mail request to store@sisssa.it and then go and collect it from the store, which is located at level -1.

SISSA CLUB – You may ask your colleagues about the SISSA Club <https://club.-sisssa.it>, which provides sporting facilities, a piano, a table tennis, cultural events, etc. There is also a SISSA choir and a cineclub, showing movies in English or with English subtitles. There is a music room in Building B4.

SISSA ALUMNI SOCIETY – The SISSA Alumni Society organizes a number of activities and seminars which might be of interest for current SISSA students, as well as provides opportunities for mentoring etc. See <https://alumni.sisssa.it/> for additional information. Although you are entitled to become a member of the society only after your graduations, some of the activities are open to current students. Please contact the association for further details.

KINDERGARTEN – On SISSA campus you can also find the kindergarten, "La SISSA dei Piccoli", providing nursery care for up to 21 children aged between 12

and 36 months: <http://www.sissa.it/kindergarten> . The kindergarten is located in the park, in a welcoming and completely renewed building where children can also play in a large outdoor area.

150 HOUR FELLOWSHIPS – These are small supplementary bursaries paid to students in return for them doing jobs which are important for the smooth running of SISSA (e.g., webmaster, library assistance, computing software support, etc.). Every year there are official announcements of the available posts and the most suitable candidate is selected for each job from among the applicants. Please ask the Student Secretariat or members of the group for more details.

LANGUAGE LESSONS – SISSA offers free Italian and English language courses. English courses are taught at two levels. You are strongly encouraged to attend the English classes if English is not your mother tongue, possibly before the end of your second academic year. For both courses ask information to Riccardo Iancer (iancer@sissa.it).

MIRAMARE CAMPUS – SISSA is one of the several Scientific Institutions in Trieste. In particular there is a daily shuttle service to/from the ICTP (ask the reception for the timetable). ICTP has scientific connections with SISSA (e.g., joint seminars, conferences, etc.) and provides various facilities (library, cafeteria etc.). You might be interested in looking at the ICTP web page <http://www.ictp.it> as well as in subscribing to the ICTP mailing list “ICTPLINK” which informs on weekend activities, concerts, sale announcements, etc.

==== STARTING UP in EU/ITALY/TRIESTE ====

HOUSING – Accommodation in Trieste cost around 200-400 euro/month, depending mostly on the accommodation you choose (room vs apartment). Each year, students have to pay the “Tassa per il diritto allo studio” to the Regional Authority for the University Study (ARDIS). It costs about 100 euro and allows you to access several ARDIS services, e.g., use the university cafeterias and obtain discounts for sport activities through the Sport University Center (CUS). Most of PhD students can apply for a University apartment at ARDIS. For that you need the same documents as to apply for an ARDIS card plus a certificate issued by SISSA that confirms your student status. The houses are a few and priority is given to students with lower income. Moreover, students can ask for partial refund of their rent, by providing the rental contract plus the SISSA certificate when applying for the ARDIS card. Please note that without a formal and registered rental contract, this partial refund cannot be granted. Most importantly, as written above, SISSA has a housing office which can assist you.

CONTRIBUTIONS TO PENSION – Contributions to the national pension fund are paid in part by SISSA and in part by the student. According to the Italian law, you cannot get them back at the end of your PhD studies, even if you are not Italian. If you come from a country having a convention with Italy, you will have to reclaim them in the future.

ITALIAN RESIDENCE AND IDENTITY CARD – Foreign students can ask for an Italian domicile (*residenza*) and an Identity Card (*Carta d'Identità*). This card is a valid identification document in Italy. You have to submit an official translation of your birth certificate to obtain them. Note that without a certificate of “*residenza*” you cannot buy a car, convert your driving license and apply for residential rates for your electricity bills. It is also required in order to invite a spouse (if married).

HEALTH CARE – Foreign students may use the Italian healthcare system (SSN) for sanitary assistance, as any other EU citizen. In order to register into SSN, you should request it in the ASL (Sanitary Local Authority, via Stock 2, Trieste). It costs about 150-200 euro/year and includes family doctor and hospital service.

OTHER/EXTERNAL ACTIVITIES – Apart from what we listed above there are extra benefits that you can enjoy as SISSA graduate student:

- *University Sport Center* – Students can subscribe to the University Sport Center (CUS) in order to obtain discounts for various sport activities. The cost is about 15 euro/year. Beware: you will not have much time for this during the first year!
- *Discounts in cinemas* – Students can obtain a discount at all cinemas in Trieste. It is necessary to show either an International Student Identity Card (ISIC) or the SISSA student card. The first can be obtained at the CTS (Piazza Dalmazia 3/b) and costs about 15 euro/year; the SISSA card can be obtained for free, by bringing a photo to the Student Secretary. It is also possible to show the “Trieste Universitaria” card, obtained free of charge from ARDIS (<http://www.ardis.fvg.it/>) together with the card for the meal discounts. This card also allows to get many other discounts in the Friuli Venezia Giulia region, for example for purchasing ski passes.
- *Cultural activities* – Information on cultural activities in Trieste can be found in: ICTP newsletter, NTWK monthly journal (freely distributed in many bars), Il Mercatino (first issue of each month), and on the websites of: Teatro Miela, Rossetti, Teatro Lirico Verdi and on Trieste.com.

==== Being a SISSA member ====

PUBLICATIONS – If you write a paper not in collaboration with a SISSA staff member and you want to use your SISSA affiliation, you must first receive a formal approval from your supervisor/tutor (or any staff member if you do not have

yet a formal supervisor) before submitting the paper for publication or uploading it to the physics arXiv.

AFFILIATIONS – Use of affiliations in addition to SISSA (and INFN once you are affiliated to INFN) is not allowed, unless authorized by SISSA. Ask the PhD coordinator for any question on this matter.

PRESENCE IN SISSA – As a SISSA student, you are required to be present in SISSA and to take part actively in the life of the School and of the Group. Apart from authorized cases (such as for missions, illness, etc.) you are expected to work daily in SISSA or to inform your tutor/supervisor of your absence. Similarly, you are expected to attend the Tuesdays seminar, journal clubs and scientific activities.

For your own safety, you are warmly encouraged to provide the Student's Secretary (phd@sissa.it) the name and phone number of a reference person we could contact in case of emergency or of your (unjustified) absence.

YOUR RESPONSIBILITY – All of the above is about practicalities, regulations and what we can provide to help you working (hopefully well and fruitfully) in the coming years. Please do not forget that we are here for you, but also that you are a member of the Group and, as such, we will be relying on your contribution for its scientific and social life. We will always welcome any constructive suggestion from you concerning new initiatives or improvements to any aspect of our life and work here. Remember that students have to comply with the SISSA Ethical Code and Safety Regulations, which can be found here (also in English): <https://www.-sissa.it/node/16093> . Finally, please do not hesitate to contact me directly about anything that concerns you. I hope that you will learn a lot, have a successful start to your PhD and above all will have fun doing science at SISSA.

Welcome on board!

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