



SCUOLA INTERNAZIONALE SUPERIORE DI STUDI AVANZATI  
INTERNATIONAL SCHOOL FOR ADVANCED STUDIES  
Via Bonomea 265, 34136 Trieste, Italy

## To the First Year Students of the Astroparticle Physics PhD

**Welcome!** to SISSA and to the Astroparticle PhD. The Staff and all of the group members look forward to meeting you and getting to know you individually. These few notes are an attempt to give you some useful information about scientific and logistical aspects of life here. Please take a moment of your time to read them carefully, ask about anything that is not clear and give us suggestions about how to improve them. There is also a Student's Wiki page:

[http://wiki.sissa.it/students/index.php/Main\\_Page](http://wiki.sissa.it/students/index.php/Main_Page), which provides useful information. For any PhD related information you should refer to our web site <http://www.sissa.it/app/>. Also do not forget to subscribe the mailing list of the Astroparticle Physics Group/PhD <https://lists.sissa.it/mailman/listinfo/astroparticle> in order to keep updated with future group events/activities.

### **\*\* STARTING UP in SISSA \*\***

**DESK** – You will be located in rooms 521 and 523 for the first year (while you are mainly following lecture courses) and will then move to one of the smaller, quieter offices at the beginning of the second year. There should be enough computers for all of you and also sockets/cables are available for those of you who want to connect your own laptops.

**COURSES/EXAMS** – The lectures start on October 1 and take place typically on 4 days of the week (Mon-Thur, in the morning), continuing until May. The current Lecture plan (content and timetable) can be found at <http://www.sissa.it/app/phdsection/courses.php>, but note that the timetable is subject to occasional changes due to other commitments of the lecturers (and of the students). **Check frequently the group web pages! Especially the lectures' timetable.** The lectures aim to cover a range of the most important topics in Astroparticle Physics and you are asked to attend all of them. Take advantage of this opportunity (probably your last one) to have someone available to teach you about this wide range of topics, also by asking questions. At the end of the lecture courses we will ask you for feedback on what can be improved. You are required to take a number of exams, following a "credit" system, as detailed on <http://www.sissa.it/app/phdsection/teaching.php> (ask each lecturer on what is required to pass his/her exam). They have to be completed before the end of the first year and need to be registered by the Lecturer on a register held by the Student Secretariat ([phd@sisia.it](mailto:phd@sisia.it)). It is necessary to attain a satisfactory

level (as well as showing a satisfactory overall performance) in order to continue to the second year of the PhD. Students admitted via the pre-selection procedure (without doing the standard entrance exam in SISSA) have to take a special additional exam (Qualifying) at the end of the first year in order to proceed further. As integral part of the training you are strongly encouraged to regularly attend the English classes/course, organized by SISSA (ask the Student Secretary about details) during the first and/or second year.

*The lectures for the APP courses will normally take place mainly in room 113, while those that are held jointly with APC and TPP will take place in 135 and 137, respectively. Check the room on the calendar*

**SEMINARS** – The Group organizes seminars, journal clubs, brainstormings etc., (some jointly with other Institutions in the Trieste area) giving an opportunity to learn about various current aspects of Astroparticle Physics and to share our own research expertise. You are requested to attend these events as an integral part of your training. The seminar plan can be found at <http://www.sissa.it/app/activity/appcolloquia.php>. In order to be always updated about the activities of the group please subscribe the Astroparticle mailing list <https://lists.sissa.it/mailman/listinfo/astroparticle>. We also advise you to subscribe the seminars mailing lists of the Astrophysics <https://lists.sissa.it/mailman/listinfo/ap-sem> and Theoretical Particle Physics Groups <https://lists.sissa.it/mailman/listinfo/he-sem>. Also keep in mind that SISSA also offers opportunities to learn about research in other subjects through SISSA Colloquia, interdisciplinary seminars and the lectures for the Master's course in Science Communication (see its web pages for details): do not under evaluate these possibilities to broaden your knowledge and learn different skills and techniques.

**IFPU** - The Institute for Fundamental Physics of the Universe (IFPU) is a joint initiative of the International School for Advanced Studies (SISSA), the Abdus Salam International Centre for Theoretical Physics (ICTP), the National Institute for Astrophysics (INAF) and the National Institute for Nuclear Physics (INFN). The institute aims at hosting and promoting a vigorous and innovative multi-disciplinary research program focused on investigating the fundamental laws of Nature under a Cosmological and Astrophysical perspective. Director: Prof. Piero Ullio.

<https://www.ifpu.it/>

Check the web-pages for calendar of activities (most of them remotely).

Research lines: Astroparticle Physics, Astrophysical Probes of Fundamental Interactions, Early Universe, Structures in the Universe, Gravitational Wave Astrophysics, Theory and Phenomenology of Gravity.

Programs: Focus Week Program, Team Research Program – basically small workshops.

**RESEARCH** - During the first few months (while the courses are taking place), you should talk to all the staff members about possible projects for your PhD, to decide on what interests you most and who might be your supervisor (it is primarily your responsibility to find out about this). Collaborations with external advisors are possible in principle and are generally welcomed, but your main supervisor must be a member of the SISSA staff and your project must be mostly focused in SISSA. You will

start on your research immediately after the end of the courses (concurrently with completing the exams which you decided to take). The PhD project is expected to take three years, a fourth one can be asked if motivated (and requires the approval of the School Senate). In the spring of your second year, you will be expected to give a seminar to the whole group illustrating the progress made in the project. This will be a relevant element for the approval of your passage to the following year of PhD.

**STAFF** – You can have an overview of the current Group members at our web pages <http://www.sissa.it/app/people.php>. By clicking the names, you should also be able to see the specific research interests of each one of us. We aim to be an integrated research community, and we strongly encourage you to interact with the staff as well as with our postdocs, visitors and other students (and also with colleagues in other 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.

**TUTOR** – Each of you will soon be assigned a tutor: a member of staff who will be your reference person for the first year of your stay in SISSA and be responsible for following your progress as well as giving advice about courses, exams and any problems which might arise (this person may or may not subsequently become your PhD supervisor). Please, do keep in touch with your tutor and do not hesitate to contact them for any doubt/question/need that you may have.

**SECRETARIAL HELP** – Contact the Student Secretariat (room 222) at your arrival to be registered, getting magnetic cards to enter SISSA out of working hours etc. and subsequently for any general matters concerning administration and/or fellowship (email: [phd@sisssa.it](mailto:phd@sisssa.it)). For mission forms or matters strictly related to the Astroparticle Physics Group please check the mailing lists. For example: [areamission@sisssa.it](mailto:areamission@sisssa.it) and [areaguest@sisssa.it](mailto:areaguest@sisssa.it) are the e-mail addresses dedicated to the funding issues for conferences, collaboration and guest invitation.

**STUDENT REPRESENTATIVES** – There is one elected representative of the Astroparticle Physics students, currently Cecilia Oliveri email: [cecilia.oliveri@sisssa.it](mailto:cecilia.oliveri@sisssa.it). There are also elected representatives for all the students at SISSA. You can directly contact them at the mail address [studentreps@sisssa.it](mailto:studentreps@sisssa.it).

**CONFIDENTIAL COUNSELOR** - The charter of SISSA and other official documents regarding the school can be viewed at <http://www.adm.sissa.it/> (available only in their original Italian version though). In particular, the School Council has established an ethical code regarding different types of harassment and nominated Confidential Counselor, who can be contacted for any situation involving harassment, mobbing, and other forms of psychological pressure. We would like to remind or inform you that the Confidential Counselor provides free advice and assistance to every person at SISSA who feels discomfort or who is subjected to discrimination, harassment, dignity violation, or mobbing.

To solve the problem, the Confidential Counselor has a wide choice of action: she can give advice, at the request of a person, on the best way to handle the situation; she can talk to the person held responsible for wrong behaviors and collect any evidence; she can request the intervention of experts, if she considers that the case warrants it.

The Confidential Counselor maintains the maximum confidentiality and cannot take any action without having first discussed with the person who contacted her and without having received his/her consent.

Email: [giovanna.galifi@gmail.com](mailto:giovanna.galifi@gmail.com)

Note further: a psychological counseling service (dr. Laura Pomicino) is also available and can be contacted at [sissacare@gmail.com](mailto:sissacare@gmail.com). Moreover, students and post-docs can contact the [ombudspersons](#) for advice and assistance and students can take advantage of the [ARDISS](#) psychological counseling service.

See <http://students.sissa.it/issues/ombudsperson.html>

The **Students' and Research Personnel ombudsperson** is an independent, neutral and confidential resource for the students and the postdocs.

See also:

[https://www.sissa.it/\\_media/documenti/ombudsman\\_degli\\_allievi\\_finale\\_eng.pdf](https://www.sissa.it/_media/documenti/ombudsman_degli_allievi_finale_eng.pdf)

**MISSIONS** – We will try to support your needs in terms of travelling for meetings and collaborations; however, this must always be subject to your supervisor's agreement and our budgetary situation. Whenever you plan to go on a mission – whether to be paid for by SISSA or not – you will always need to ask in advance and, if the mission is approved, fill the mission forms on the SISSA web services website. The forms can be found on the SISSA web page, under Administration > Mission Forms. These cover possible financial requests, but are also necessary for insurance purposes. There are administrative rules about what expenses can be reimbursed by SISSA. If in doubt, please ask in advance. The email for asking questions is: [areamission@sisssa.it](mailto:areamission@sisssa.it)

**SISSA FACILITIES** – Please use all SISSA resources with intelligence and honesty.

A complete list of all of them can be found in the School web site

<http://www.sissa.it/about/facilities>

**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 ARDISS (once "ERDISU") card to obtain coupons to eat with a discount. The card can be obtained by just paying the ARDISS tax and by claiming it at the ARDISS 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 her/himself and his/her family (ISEE); c) fill out and print the form you can get at <http://www.ardiss.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. Also the pizzeria/restaurant just opposite to the main entrance provides a discount if you present (for yourself only) a SISSA badge.

**HOUSING** – The SISSA housing service is managed by the Welcome Office Friuli Venezia Giulia, which can help you in finding accommodation. All information on how to get assistance can be found on the SISSA web page (About > Facilities > Housing, <https://www.sissa.it/housing>).

**COMPUTING** – For computing needs, there is a Helpdesk provided by the SISSA Information Technology and Computing Services (ITCS) (<https://www.itcs.sissa.it>).

When necessary, write to them at [helpdesk@sissa.it](mailto:helpdesk@sissa.it) with detailed, constructive and polite requests for help. Keep in mind that usually there is a student in the group that is hired for support with computing needs. For matters regarding computing within the Group/PhD, you can contact the group coordinator Enrico Barausse ([barausse@sissa.it](mailto:barausse@sissa.it)). There is also a representative of the Physics Area for the ICTS. This is currently Andrea Gambassi ([gambassi@sissa.it](mailto:gambassi@sissa.it)). Lots of information about the Computing facilities can be found on the SISSA web pages. In order to get an account, please contact the helpdesk. You might also take advantage of a financial contribution from SISSA to buy a personal laptop – check the student's Wiki page or please ask the Student Secretaries about details. A cluster (Ulysses) is also available, please email [hpc-helpdesk@sissa.it](mailto:hpc-helpdesk@sissa.it) for accounts and more details.

**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. For needs related to the Astroparticle Physics Group (e.g. getting a book or a volume of a proceeding) you may contact Enrico Barausse ([barausse@sissa.it](mailto:barausse@sissa.it)).

**PHONE, MAIL and FAX** – If you need to call outside Trieste for work, you will need to ask first for authorization from the Group/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 mailboxes as well as out-mail boxes are located at level -1. A fax machine 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 the -1 Floor.

See <http://www.itcs.sissa.it/printing> for information on requesting a print.

**STATIONERY** – SISSA provides basic (and limited) amounts of stationery items (pens, pencils, notepads, etc.); to see a list of available items go to <http://www.adm.sissa.it/store/>. If you need something, you should send an e-mail request to [store@sissa.it](mailto:store@sissa.it). You will then be able to collect the items directly from the store, which is located on level -1. Their opening hours are: Mon–Fri, 09:00–12:00 (check if COVID restriction apply).

**SISSA CLUB** – You may ask your colleagues about the SISSA Club, which provides sporting facilities, a piano, a table tennis (ping pong) table, 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 FORUM** – This is the right place to share ideas, opinions news or events with your colleagues from all the areas and where the student's representatives will post most of the official communications. The forum contains a place for official discussions but there is an off Topic area where you can post whatever you may think could be enjoyed by the SISSA student's community.

You can find the forum at the address: <https://www.sissa.it/forum/>

**KINDERGARDEN** – On the SISSA campus you can also find a kindergarten, "La SISSA dei Piccoli", providing nursery care for up to 21 children aged between 12 and 36 months. <http://www.sissa.it/kindergarten> . This nursery school is situated in the park, in a

welcoming and completely renewed building where children can also play outdoors in a wide area.

**150 HOUR FELLOWSHIPS** – These are small supplementary bursaries paid to some 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. You can ask the Student Secretariat or members of the group for more details.

**LANGUAGE LESSONS** – SISSA offers Italian and English language courses. If interested ask for details about the Italian ones. The English courses are thought at two levels. As mentioned you are instead strongly advised to follow the English classes if English is not your mother tongue, before the end of the second academic year. For both courses ask information to Riccardo Iancer (<mailto:iancer@sisa.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, meetings,...) and provides various facilities (library, cafeteria etc.). You might be interested in looking at their web pages (<http://www.ictp.it/pages/info/visiting.html>) as well as in subscribing to their mailing list “ICTPLINK” which informs on Weekend activities, Concerts, Sale Announcements, ...).

**SOCIAL EVENTS** – We shall occasionally organize social events within the Group (typically a couple of dinners per year). Please consider them as an opportunity to know better the members of the Group and thus make it easier to interact and work together.

## **\* \* STARTING UP in EU/ITALY/TRIESTE \*\***

### **FINANCIAL ISSUES AND DOCUMENTS**

**HOUSING** – Accommodation cost around 200-400 euro/month, depending mostly on the accommodation you choose (room vs apartment). Each year students have also to pay the “Tassa per il diritto allo studio” to the Regional Authority for the University Study (ARDISS). It costs about 140 euro and allows you to access several ARDISS services, e.g. use the university cafeterias and obtain discounts for sport activities through the Sport University Center (CUS). Most of all PhD students can apply for a University Apartment at ARDISS. For that you need the same documents as to apply for an ARDISS card plus a certificate issued by SISSA that confirms your student condition. The houses are a few and priority is given to those 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 ARDISS card. Please note that without a formal rental contract, this partial refund cannot be granted. Most importantly SISSA has a Housing office among its facilities, see above the Facilities section of this document.



**TAXES FOR RETIREMENT** – Taxes for pension 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 future.

**ITALIAN RESIDENCE AND IDENTITY CARD** – Foreign students can ask for an Italian domicile (residenza) and an Identity Card (Carta d'Identità). The 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).

**BANK** – The Unicredit Bank is the bank currently used by SISSA. You might consider opening an account with them. An ATM is available in the entrance hall. Sometimes this ATM can be also used to pay bills.

**MEDICAL ISSUES** – First aid is available within SISSA: contact any of the secretaries for information. For more serious (urgent) medical problems, there is a medical room in Building B4. Details to be provided. Sanitary assistance for non EU/EEA students needs to be arranged via either a private insurance or by registering to the National Health System; this is also needed before applying for the permit of stay and the cost is reimbursed by SISSA, ask at the student secretary office how to start the procedure.

**PSYCHOLOGICAL COUNSELING** – The PhD years can be stressful ones in the life of a young researcher. If you fell under strain do not hesitate to discuss this with your supervisor or PhD coordinator or resort to the psychological assistance offered by SISSA.

You can find a contact in this sense at the following link:

[http://wiki.sissa.it/students/index.php/Psychological\\_support](http://wiki.sissa.it/students/index.php/Psychological_support).

**OTHER/EXTERNAL ACTIVITIES** – Apart from what we listed above there are extra benefits that you can enjoy as a 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. There is a gym in one of the SISSA buildings in the park (see above).

**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 ERDISU 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** – It is considered a rule of common sense that if you write a paper, which is not in collaboration with a SISSA staff member, you must receive formal “approval” from your supervisor/tutor (or any staff member if you do not have yet a formal supervisor) before submitting it for publication or uploading it to the physics ArXiv.

**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 situations (such as for missions, illness) you are expected to work in SISSA or to inform your tutor/supervisor of your absence. For your own safety, you are warmly encouraged to give to Mrs. Lorena Bencina the name and phone number of a reference person we could contact in case of emergency or your (unjustified) absence.

**YOUR RESPONSIBILITY** – All of the above is about practicalities, “regulations” and what we can provide to help you to work (hopefully well) in the coming years. Please do not forget that we are here for you, but also that you are a full member of the Group and we will be relying on your contribution to its life scientifically and socially. We will always welcome any constructive suggestion from you for new initiatives or for improvements to any aspect of our life and work here. Students have to comply with the SISSA Codice di Condotta (Ethical Code) and Safety Regulations.

Finally, in case of any concern, please do not hesitate to directly contact the Coordinator of the Astroparticle Physics group, Enrico Barausse, Room 531 on the fifth floor, left wing of the SISSA Main Building, Phone: ext. 867, E-mail: [barausse@sissa.it](mailto:barausse@sissa.it).