

PhD Info Day

Alessandro Cerri



UNIVERSITÀ
DI SIENA
1240

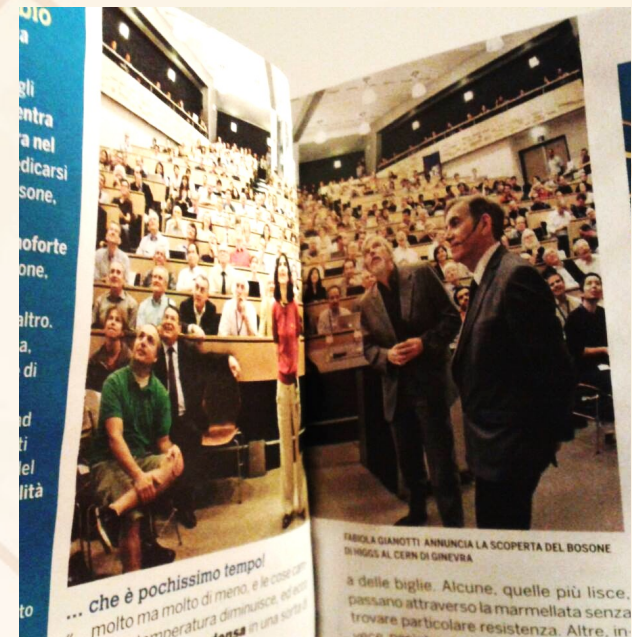
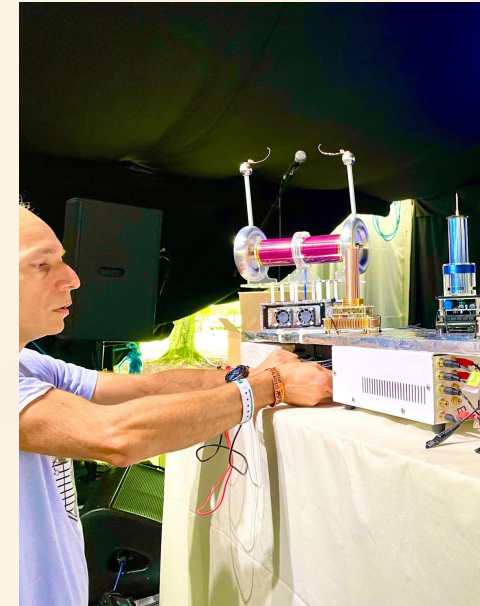
Welcome!

Let's have a quick roundtable to introduce ourselves:

- Your name
- Cycle/PhD year?
- Where are you from?
- What languages do you speak?
- Some infos about yourself:
 - Education, background
 - Hobbies etc.
 - One special skill you have
 - A curious fact about you

Who am I?

- Professor of Physics with the Universities of Siena
- I am from Pisa (birth and education) but I spent the last 20+ years abroad (Fermilab, Berkeley, CERN, Sussex...)
- Education (undergrad and postgrad)
 - Outreach (community events, festivals...)
- Research: experimental particle physics at CERN (ATLAS/LHC, Muon Collider), Fermilab (CDF), LBNL (e.g. PDG)
 - Particle physics (present and future!)
 - Detector design and construction
 - Detector operation
- Hobbies: sailing, cycling, running, cooking, cocktails, travel...
- One Skill: Morse code
- Curious fact: I am the (only) green shirt guy in “that” topolino picture!



Welcome

Mattina

PhD Info Day and Cocktail Event

📅 Thursday 5 Feb 2026, 09:00 → 19:00 Europe/Rome

09:00 → 09:15 **Welcome** 🗨️

09:15 → 11:15 **PhD Students Seminars**

Slides uploaded on Google Drive:

<https://drive.google.com/drive/folders/1t5DIdS4XJKAkhh5KEfHZDt5wnvDn-nPz?usp=sharing>

Cycle 38

Lisa Nikolic, Francesco Terzuoli

Cycle 39

Lucio De Simone, Andrea Foresi, Francesco Paciolla

Cycle 40

Martina Cucinotta, Sayan Dhani, Annalisa Feliziani, Antonio Greco

Cycle 41

Giovanni Besio, Lorenzo Capra, Giulia Saveria Valli

11:15 → 11:45 **Practicalities on the experimental PhD program**

12:00 → 13:20 **Lunch**

15:00 → 19:00 **Cocktail Event**

Location: Aula Magna del Rettorato

Make sure you have confirmed your participation through:

<https://forms.gle/CKzw1sKN2fySveyR7>

📎 Locandina_cocktail ...

Pomeriggio

EVENTO DI ORIENTAMENTO E NETWORKING DELLE SCUOLE DI DOTTORATO DEL DSFTA

• SCIENZE E TECNOLOGIE AMBIENTALI,
GEOLOGICHE E POLARI
• FISICA SPERIMENTALE

13 FEBBRAIO 2026
15:00 - 19:00

AULA MAGNA PALAZZO DEL RETTORATO
VIA BANCHI DI SOTTO, 55
53100, SIENA

SIPPING SCIENCE

Cocktail day

PROGRAMMA

SALUTI DEL MAGNIFICO RETTORE PROF. ROBERTO DI PIETRA

APERTURA DEI LAVORI

PROF.SSA LETIZIA MARSILI, COORDINATRICE DOTTORATO STAGP
PROF. ALESSANDRO CERRI, COORDINATORE DOTTORATO FS

KEYNOTE SPEAKER

PROF. FRANCESCO FERRINI, UNIVERSITÀ DI FIRENZE
"RIPENSARE LA CITTÀ CON LA NATURA:
BIODIVERSITÀ, SALUTE E PROGETTO URBANO"

RESEARCH REELS

PRESENTAZIONI FLASH (30 SECONDI) DEI PROGETTI DI RICERCA
DEI DOTTORANDI E DELLE DOTTORANDE

SIPPING SCIENCE

INCONTRI BREVI E INFORMALI PER FARE DOMANDE,
CONFRONTARSI E APPROFONDIRE TEMI DI RICERCA, ESPERIENZE E
PROSPETTIVE FUTURE DAVANTI A UN APERITIVO CONVIVIALE



UNIVERSITÀ
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UNIVERSITÀ DI
SCIENZE FISICHE, DELLA TERRA
E DELL'AMBIENTE
— DSFTA

Logistics

- Lunch (pizza) delivered around 12:30pm
- Cocktail event will end around 7pm: make sure you stick around until its conclusion

Practicalities

Why are you doing a PhD in experimental physics?

- ☐ Free pizza!
- ☐ I had no better ideas
- ☐ I love physics and want to become a scientist
- ☐ It's a boost for my future career
- ☐ I want to go work in the private sector
- ☐ ...

Why are you doing a PhD in experimental physics?

- A PhD is an investment for your future: see it as a multiplier for any future endeavour
- It's not the best paid employment: if you are here for the money, question it!
- Just like any investment, taking it as one would take menial labor is a waste of your time and resources
- It is tolling: you need to be motivated or you'll hate it by the end of your degree

Workplace

- Your **place of work is the University of Siena**: substantial variations on this require authorization from coordinator/CD
 - If you need to be away (eg your research group is not in Siena):
 - You need authorization and appropriate insurance arrangements
 - This is generally at your expenses
 - You are **expected to arrange things so that you are present in person for PhD school events** (exams, seminars, PhD such as this etc.)
 - Uni funds (including your research funds) **cannot** be used for travel from your research position to Siena
- You are paid by the university and expected to respect its rules and regulations
 - Workplace behaviour: be kind, respectful, tolerant, professional
 - EDI
- Plagiarism and collusion are not tolerated: You will risk your studentship and your degree

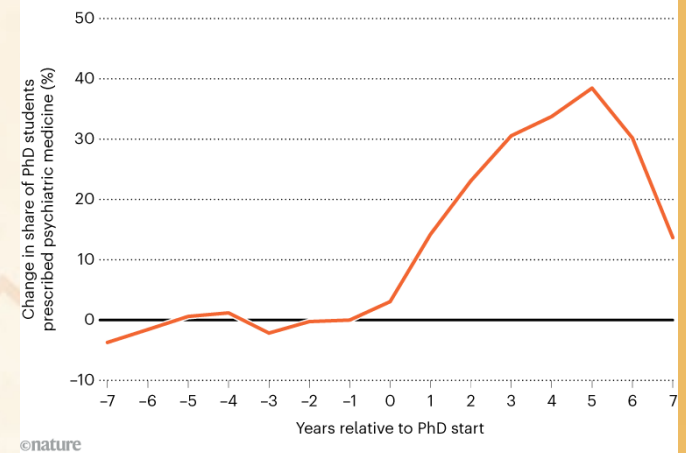
We take these aspects **very** seriously. Terminations have occurred in the past

If something goes wrong

- Well-being: this must be always your #1 priority
 - A PhD can be tolling. You are not alone!
 - The sooner you flag issues, the more options you will have at your disposal... but it's never too late!
 - The university offers support structures
 - Do not be concerned about asking for help if needed: we (myself, student reps, supervisors and tutors) are here to listen and help in full discretion
 - There are mechanisms (e.g. suspending your PhD) to cope with major problems
- Supervision/courses: myself, student reps, supervisor, tutor. We are here to help in full confidence.

PHD PRESSURES

A study that followed all the PhD students in Sweden in 2006–17 shows that the likelihood of doctoral candidates needing medication for mental-health issues increases sharply after the start of their studies.



Experimental Physics PhD Overview and timeline

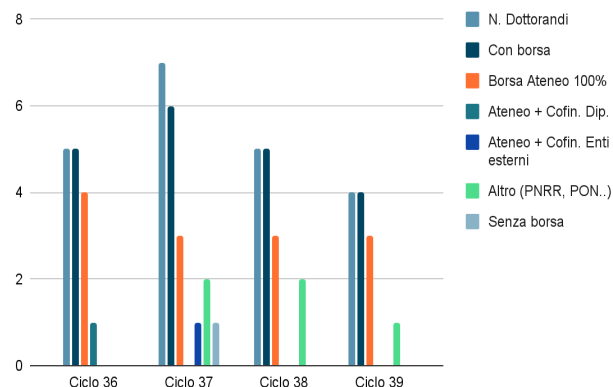
- 3 year doctoral programme
 - **Year 1**
 - Research – 20 CFU
 - Training – 40 CFU
 - Total 60 CFU approved w. final exam
 - **Secondo anno**
 - Research – 40 CFU
 - Training – 20 CFU
 - Total 60 CFU w. final exam
 - **Terzo anno**
 - Research – 50 CFU
 - Training – 10 CFU
- Total 60 CFU w. final exam
- Training credits:
- Y1:
 - Courses (march-July)
 - Y1-2-3: Seminars/Schools/Workshops...

- **Exams:**
 - Y1: exams from courses plus final exam
 - Y2: topical seminars plus final exam
 - Y3: topical seminars, admission to thesis defense + defense
 - **Prerequisites for final exam (every year):**
 - Report on activities undertaken
 - Receipt of questionnaire submission (SISVALDIDAT)
 - Final year: +almalaurea questionnaire receipt
- **Thesis timeline:**
 - Ideally, thesis defense should happen within the three years
 - Final exam admission form submitted **at the latest** 1 month before the end of last year, **otherwise you lose your title**
 - Final exam takes **at least** 2 months from the time you submit the final exam admission request form. This is **extremely optimistic:**
 - 0 time for nomination of referees
 - 1 month for referral
 - Positive referees responses
 - 0 time for nomination of defense committee
 - 1 month from the moment referees responses are received to holding PhD defense
 - Final exam admission form requires:
 - Thesis title/abstract and submission date
 - 3 referees available for referral on the basis of the thesis timeline
 - Almalaurea submission receipt
 - Tutor and supervisor sign-off

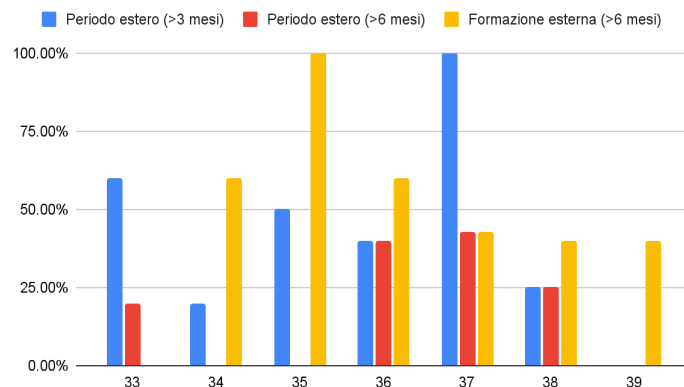
PhD School Performance Indicators

- Not only a formality: our survival depends on their health!

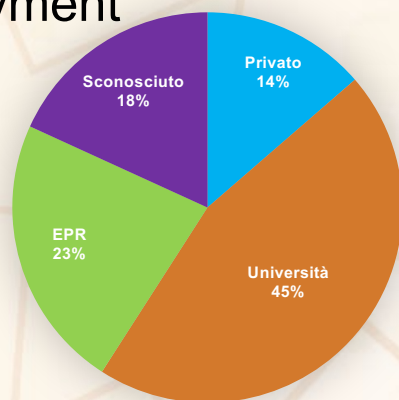
N. dottorandi iscritti al I anno - Fisica Sperimentale



Percentuale di tempo trascorso



Employment



Last QA review:

- Insufficient submission rate for student questionnaires
- Duration of stays abroad critically low

Lectures (Y1)

PhD School in Experimental Physics - University of Siena															
Timetable - last update: 22/1/2026															
		11-12	12-13	-	14:30-15:30	15:30-16:30	Remarks			11-12	12-13	-	14:30-15:30	15:30-16:30	
3/3/2026	Tue	Marrocchesi	Marrocchesi	-				4/3/2026	Wed			-			5/3/2026
10/03/2026	Tue	Marrocchesi	Marrocchesi	-	Marrocchesi	Marrocchesi		11/03/2026	Wed			-			12/03/2026
17/03/2026	Tue	Marrocchesi	Marrocchesi	-	Checchia	Checchia		18/03/2026	Wed			-			19/03/2026
24/03/2026	Tue	Marrocchesi	Marrocchesi	-	Marrocchesi	Marrocchesi		25/03/2026	Wed	Stolzi	Stolzi	-	Mariotti	Mariotti	26/03/2026
31/03/2026	Tue			-				01/04/2026	Wed			-	Mariotti	Mariotti	02/04/2026
07/04/2026	Tue			-			easter	08/04/2026	Wed			-			09/04/2026
14/04/2026	Tue			-				15/04/2026	Wed			-			16/04/2026
21/04/2026	Tue			-				22/04/2026	Wed			-			23/04/2026
28/04/2026	Tue	Xiotidis	Xiotidis	-	Xiotidis	Xiotidis		29/04/2026	Wed			-			30/04/2026
05/05/2026	Tue	Prada Moroni	Prada Moroni	-	Prada Moroni	Prada Moroni		06/05/2026	Wed			-			07/05/2026
12/05/2026	Tue	Prada Moroni	Prada Moroni	-	Prada Moroni	Prada Moroni		13/05/2026	Wed			-			14/05/2026
19/05/2026	Tue	Bianco	Bianco	-				20/05/2026	Wed	Bianco	Bianco	-	Bianco	Bianco	21/05/2026
26/05/2026	Tue	Annovi/Francavilla	Annovi/Francavilla	-	Annovi/Francavilla	Annovi/Francavilla		27/05/2026	Wed			-	Retico	Retico	28/05/2026
02/06/2026	Tue			-			feita della repubblica	03/06/2026	Wed	Annovi/Fr	Annovi/Fr	-	Annovi/Francavilla	Annovi/Francavilla	04/06/2026
09/06/2026	Tue	C. Marinelli	C. Marinelli	-				10/06/2026	Wed	Bossini	Bossini	-	Bossini	Bossini	11/06/2026
16/06/2026	Tue			-				17/06/2026	Wed			-			18/06/2026
23/06/2026	Tue	C. Marinelli	C. Marinelli	-	Verna	Verna		24/06/2026	Wed	Annovi/Fr	Annovi/Fr	-	Annovi/Francavilla	Annovi/Francavilla	25/06/2026
30/06/2026	Tue	Morsch	Morsch	-	Verna	Verna		01/07/2026	Wed			-			02/07/2026
07/07/2026	Tue			-				08/07/2026	Wed			-			09/07/2026
14/07/2026	Tue			-				15/07/2026	Wed			-			16/07/2026

Lectures	Hours	
Marrocchesi	12	Experimental Techniques in High Energy and Astroparticle Physics
Stolzi	2	Charged particle identification, measurements of cosmic-ray fluxes
Checchia	2	Electromagnetic and hadronic calorimetry
Mariotti	6	Frontiers in Laser Spectroscopy
Morlino	0	An Introduction to Acceleration and Propagation models of CR
A. Marinelli	0	An Introduction to Astroparticle phenomenology
Annovi/Francavilla	12	Statistical Treatment and Analysis of Data
Bossini	4	Precision timing detectors for High Energy Physics
Retico	2	Machine Learning methods in Medical Physics
Verna	4	Analysis techniques for ground-based gamma-ray astronomy
Morsch	2	Quantum Computing
Prada Moroni	8	An Introduction to Stellar Astrophysics
Veronesi	0	Advanced and 2D materials
C. Marinelli	4	Frontiers in Optical Materials and applications
Marmugi	0	Sensing and imaging with atomic magnetometers
R. Cappuccio	0	Quantum Computing: workshop
M. Bianco	6	Gaseous particle detectors
Xiotidis	4	Machine Learning for Experimental Physics

“Transversal Skills”

Aka “soft” or “core” skills: transferable abilities, knowledge, attitudes not tied specifically to the discipline and crucial for adapting to work settings/life situations

Examples:

- Critical thinking
- Problem solving
- Interpersonal
 - Communication
 - Teaching
 - Outreach
 - Organizational, teamwork...
- Intrapersonal (self-discipline, enthusiasm, perseverance, self-motivation)
- Interdisciplinarity

How to acquire them:

- Seminars
- Training
- Practice
 - Outreach events
 - Public speaking
 - Interaction with people from other disciplines in a formal/informal setting

At this stage we are relatively flexible and happy to include opportunities flagged by the university, but also those you may find yourself. Accounting in terms of contribution to your “CFUs” is based on your annual reports. Make sure you include this aspect!

Financial aspects

- If your PhD comes with a studentship:
 - Monthly personal allowance: ~1100 eur
 - Yearly research funds ~3(years)x1600 eur
- For stays abroad of duration between 2(60d) and 12 months your studentship **can be** increased by 50% iff:
 - Authorised by coordinator
 - All travel forms have been submitted:
 - Department (insurance)
 - Doctoral school (authorization)
 - PhD admin office (salary)

You need to prepare this in advance: at least a month prior!

Travel

- You **must submit** travel forms before (coordinator+department) travelling for insurance reasons.. No matter what the funding source is
- PhD research funds are limited: try to use them wisely (often external funds are available for research-related travel)

Time abroad: requirement

- Spending 6 months (out of the course's 36) abroad is a **requirement** of your PhD
 - The survival of the PhD programme depends on this
 - It is **mandatory** for you to respect this requirement
 - Exceptions need to be carefully discussed and reviewed
 - Do not postpone this to the “far future” of the last year: it won't happen
- What counts:
 - Collaboration, meetings, study abroad, internships, shifts → as long as related to your thesis work
- Not counting:
 - Holidays (!), conferences, seminars

PhD School Bodies

- PhD Coordinator (AC)
- Admin Support: Antonietta Monaco
- Student Reps: Francesco Paciolla, Lucio De Simone
- School Board (“collegio docenti”):
 - Professors and researchers from UniSi, Italian and foreign institutes
 - Alvigi Mariagrazia, Università degli Studi di Napoli “Federico II”, FIS/01
 - Baldini Luca, Università degli Studi di Pisa, FIS/01
 - Bigongiari Gabriele, Università degli Studi di Siena, FIS/
 - Bonechi Claudia, Università degli Studi di Siena, CHIM/02
 - [Brogi Paolo](#), Università di Siena, FIS/04
 - [Cerrì Alessandro](#) (*), Università di Siena, FIS/01
 - Ciocci Maria Agnese, Università degli Studi di Siena, FIS/01
 - Delogu Pasquale, Università degli Studi di Pisa, FIS/07
 - Franzosi Roberto, Università degli Studi di Siena, MAT/07
 - Lamanna Gianluca, Università di Pisa, FIS/01
 - Maestro Paolo, Università degli Studi di Siena, FIS/01
 - Marrocchesi Pier Simone, Università degli Studi di Siena, FIS/01
 - Messineo Alberto Maria, Università degli Studi di Pisa, FIS/01
 - Paoletti Riccardo, Università degli Studi di Siena, FIS/01
 - Rosso Valeria, Università degli Studi di Pisa, FIS/07
 - Turini Nicola, Università degli Studi di Siena, FIS/01
- Quality Assurance:
 - AC, Student Reps, Prof. Franzosi, Prof. Bigongiari

References

- Official references are the official university documents
- It is **your responsibility** to be informed on them as part of your PhD contract
- Indico documentation, vademecum etc. are provided for convenience on best effort: double check against official documents
- Be respectful of other people's time: before asking a question please check these sources

PhD Documentation (NEW)
Saturday 10 Feb 2024, 09:00 → 18:15 Europe/Rome

- 09:00 → 09:20 Vademecum**
Vademecum_proce... Vademecum_proce...
- 09:30 → 09:50 Regolamento D'Ateneo per il Dottorato (Regulations)**
Link Regolamento Regulations page (...)
- 10:00 → 10:20 Budget**
budget_dottorandJ...
- 10:20 → 13:00 Documentation: (Fill and submit by Online Request Form)**
 - 10:20 Nulla Osta**
modulo_richiesta_n...
 - 10:40 Mission Request (any mission in Italy or abroad)**
1) Submit the attached form through the Indico interface
2) Submit with the department secretariat the appropriate travel form (<https://www.dsfa.unisi.it/it/dipartimento/modulistica-interna>) [either with or without reimbursement from the university, depending on what agreed]
3) You must fill the mission survey web form summarising your trip at the end of each trip.
Google form missione_dichiarazi... richiesta_di_autoriz...
 - 11:00 Mission Reimbursement**
liquidazione-della-m... missione_dottorato...
 - 11:20 External Activity Request**
Modulo_richiesta_a...
 - 11:40 External Activity Conclusion**
Conclusione_period...
 - 12:00 Extension Request**
modulo_richiesta_pr...

13:00 → 14:00 Travel Abroad (Soggiorno all'Estero)
These are the formalities you must fulfill before travelling abroad for any travel initiated after July 10th 2025.

13:00 Travel Abroad Form with bursary increase (>15 days and no other funds)
5m
PRIOR TO YOUR TRIP
1) Prior to making travel arrangements, you need the authorisation of the PhD office (see Richiesta autorizzazione soggiorno fuori sede (estero e Italia) / Request for authorization of period in external structure at <https://www.unisi.it/didattica/corsi-post-laurea/dottorati-di-ricerca/modulistica-e-certificati>).
2) This needs to be sent to the "ufficio dottorato" (ufficiodottorato@unisi.it) and included with the mission request form above.
The mission request form shall serve also as authorisation request with the PhD school committee/coordinator.
3) You must fill the start of travel form ahead of any travel abroad with the actual travel start date. (see links below to forms at <https://www.unisi.it/didattica/corsi-post-laurea/dottorati-di-ricerca/modulistica-e-certificati>). This can happen only when you have finalised your departure plans.
AFTER CONCLUDING YOUR TRIP:
4) You must fill the end of travel form at the conclusion of any travel abroad, submitting with the actual final end of travel date. (see links below to forms at <https://www.unisi.it/didattica/corsi-post-laurea/dottorati-di-ricerca/modulistica-e-certificati>).
5) You must fill the mission survey web form summarising your trip at the end of each trip.
End of Travel Mission survey form Start of Travel

14:20 → 14:40 Online Request Form
20m
Submit the online form and send a confirmation email to alessandro.cerri@AT-unisi.it and antonietta.monaco@AT-unisi.it (follow the links below)
Form PhD Request mailto:riccardo.paoL...

14:40 → 17:55 PhD Admission Exams and Activity Reports (deadline: July 15th)
To be submitted by July 15th. You should report any travel undertaking since the beginning of your PhD that has not been submitted through the google form in the past.

- 14:40 1st Year - Astrophysics/Statistics Exams + Activity Report+Mission reporting form**
20m
facsimile Activity Re... Mission survey form PhD exams 1st year
- 15:05 2nd Year - Low/High Energy Seminars + Activity Report+Mission Survey Form**
20m
facsimile Activity Re... Mission survey form PhD exams 2nd year
- 15:25 3rd Year - Activity Report+Mission survey form**
20m
facsimile Activity Re... Mission survey form PhD exams 3rd year

17:55 → 18:15 Final Exam Admission
20m
Submit the online form and send a confirmation email to alessandro.cerri@AT-unisi.it and antonietta.monaco@AT-unisi.it (follow the links below) at least one month before the end of your contract (end of September)
Update the information on your trips abroad to date and make sure you add entries in case you take further trips until the exam date
Final exam admission form to be submitted at least 2 months before target final exam date and before the conclusion of your 3rd year's "attività formativa".
Abstract_facsimile... AmmissioneEsame... facsimile Final Repo... Final Admission On... Mission survey form
Thesis guidelines, in...

Suggestions for improvements and help are always welcome!