

ECOLE DOCTORALE ASTRONOMIE & ASTROPHYSIQUE D'ILE DE FRANCE

Laurent Verstraete (U. Paris-Saclay & IAS)

The Ecole Doctorale (ED)

Federation for the entire field of Astronomy & Astrophysics

- ▣ research community wishes a regional organisation with 4 institutions

Paris Sciences Lettres,

Univ. Paris-Saclay, Sorbonne Univ., Univ. Paris-Cité

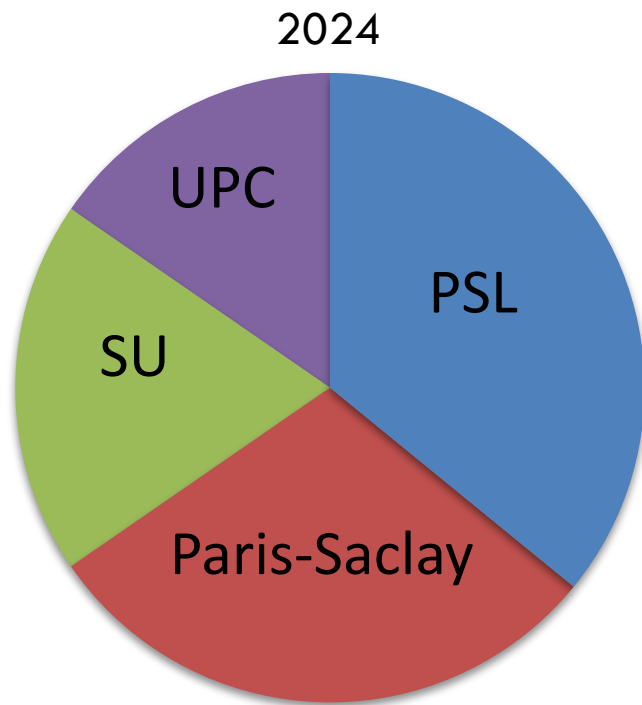
- ▣ 18 laboratories

GEPI, IMCCE, LERMA, LESIA, LUTH, SYRTE, LPENS, IAS, ISMO, CEA-AIM, CEA-DAM, CEA-MdS, LATMOS, LPP, LMD, IAP

Steering of Ecole Doctorale

- Directory board
 - ▣ Benoît Semelin (SU, director)
 - ▣ Laurent Verstraete (Paris-Saclay)
 - ▣ Zakaria Meliani (PSL)
 - ▣ Frédéric Daigne (SU)
 - ▣ Jérôme Rodriguez (UPC)
- Council
 - ▣ 20 members + 5 PhD Students + 5 guests

PhD Students



- ~160 Students in 2024 (52 @ UPS)
30% women, 40% foreigners
- for a total of 252 advisors
44 @ Paris-Saclay

PhD Topics & skills

- Big scientific questions...

Solar system, Exoplanets, Star and planet formation, Stellar physics,
Compact objects, Galaxies, Large scale structures & Cosmology,
Instrumentation

- Every day of a PhD ...

Instrumentation, data & signal, data & modeling, simulations, theory

To start a PhD

Need to be

- Holder of a *Master's* degree or equivalent
- Endorsed by the PhD advisor and the lab director
- Proposed by the Ecole Doctorale with funding for **3 years**

PhD students are paid employees with a work contract with University, CNES, CEA, CNRS. This is a first professional experience

PhD projects & application

- PhD projects are validated by the Ecole Doctorale
 - original research topic and recognized mentoring ability
- Application
 - ▣ Full CV detailing training and research experience
 - ▣ Letter of motivation
 - ▣ Academic results
 - ▣ Up to 3 letters of recommendation

The contest for funded PhD

- average of 20 regular contracts + half CNES, region, space academy,
- The Ecole Doctorale organises a contest common to all institutions
 - Single jury (12 members + 5 student observers)
 - Selection on the basis of record and interview

The 2024 contest

- 63 PhD projects submitted
- 88 candidates with advisor's support (initial ~150)
24 Women (W)/ 33 Foreigners (F)
- Selection
 - 60 **Interviews** (20W, 24F) end of May,
 - in remote 12' + 8'
 - Training
 - Research experience (context, issues, skills, results)
 - Presentation of the PhD project: why you ?
 - Final jury: June 5th,
regular PhD contracts for 23 students !
(10W, 5F)

The 2025 Contest: timeline

- The PhD projects online: from now on to February 1st 2025
- Applications: from early February to end of April 2025 on ADUM.
- Selection for interview: early May 2025
- Interviews: end of May 2025
- Results: early June 2025

Apply for PhD is a project

- competitive contest
 - preparation of interview with advisor(s) is crucial
 - only 30% of PhDs start on regular contracts
- ➔ need to apply for several PhD projects
with different fundings and schedules

Different PhD fundings

Specific PhD projects, with specific schedules and somewhat less pressure

- ▣ ANR, ERC, DIM-Origins, CFR/CEA, ONERA, CNES, ESO, ESA, CIFRE, UPS COFUND (AI), CFM, half funding 2 applications
- ▣ Adds 34 (!) fundings to the regular 23: total of 57 PhDs starting in 2024

PhD follow-up

- review every year by law
- mid-term review by Ecole Doctorale
- financial support for topical schools
- Elbereth conference by PhD students for PhD students
- 5 PhD students, representatives elected to the council
- The ED board always ready to answer your questions.

Training during PhD

Compulsory for all PhD since 2016

- average of 90h training: disciplinary, opening and future
A topical school (broad spectrum): 1 week (~ 30h).
1 "Long module": 30h & 2 "Short modules": 2 x 15h.
Training on ethical science, GBV (VSS).
- teaching or spreading science (10h per 64 actual hours)
- Certificate delivered at the end of the PhD

After the PhD

Over 10 years

- 30% research permanent position in France (research + teaching, engineer.)
- 20% permanent position abroad in research (Eng. & management, ESO, ESA)
- 45% private position (data science, scientific computing, instrumentation,...)
- 5% teaching, scientific diffusion, other

Contact us

<https://ecole-doctorale.obspm.fr>



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