

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

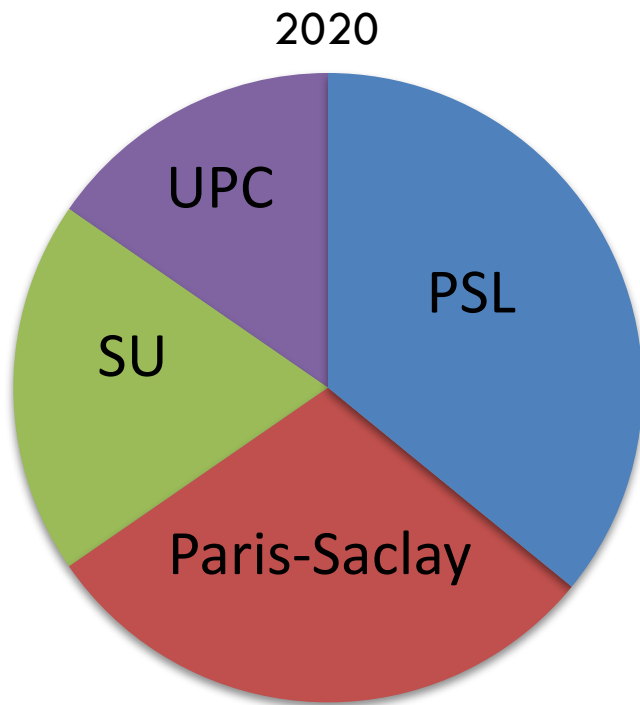
- ▣ 18 laboratories

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

Steering

- **Directory board**
 - ▣ Thierry Fouchet (SU)
 - ▣ Laurent Verstraete (Paris-Saclay)
 - ▣ Alain Doressoundiram (PSL)
 - ▣ Frédéric Daigne (SU)
 - ▣ Jérôme Rodriguez (UPC)
- **Council**
 - ▣ 20 members + 5 PhD Students + 5 guests

PhD Students



- 1 65 Students registered in 2022
30% women, 40% foreigners
- for a total of 252 advisors
44 @ Paris-Saclay

Topics & skills

- **Big scientific questions...**

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

- **Every day...**

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

Start a PhD

- Holder of a *Master's* degree or equivalent
- Endorsed by the PhD advisor and the lab director
- Be 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 from the 4 Institutions
- The Ecole Doctorale organises a contest common to all institutions
 - Single jury (12 members + 5 student observers)
 - Selection on the basis of a) record and b) interview

The 2022 contest

- 65 PhD projects submitted
- 105 (/179) candidates with advisor's support
 - ▣ 30 Women / 39 Foreigners
- Selection
 - ▣ **Record:** Marks are important... but also the match to the project (specific skills)
 - ▣ **52 Interviews** in May, remote is fine (12' + 8')
 - Training
 - Research experiences (context, issues, skills, results)
 - Presentation of the PhD project: why you ?
 - ▣ Final jury: June 1st,
regular PhD contracts for 25 students ! (57 PhDs start in 2022)
(10F, 8 foreigners)

The 2023 Contest: timeline

- The first projects online: up to February 1st 2023
- Applications: from early February to end of April 2023 on ADUM.
- Selection for interview: early May 2023
- Interviews: mid-May 2023
- Results: early July 2023

Apply for PhD is a project

- competitive contest
- only 30% of PhDs start on regular contracts
 - ➔ need to apply on (at least) 2 PhD projects
with different fundings and schedules
- preparation of interview with advisor(s) is crucial

Different PhD fundings

Specific PhD projects, with specific schedules and somewhat less pressure

- ▣ CDSN, AMX, IDEX (IDI, IA), ANR, ERC, DIM-ACAV +, CFR/CEA, ONERA, CNES, ESO, ESA, CIFRE, Fondation CFM, ...
- ▣ CSC (Chine), CONICYT, CONCYTEC, CAPES (South Am.), IFCPAR (India), Vernadski (Russia), USTH (Vietnam), CoFUND, Universities, Ministeries.

sometimes half funding, 2 applications (CNES, CNRS, CEA,...)

PhD follow-up

- review every year
- 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 100h training: disciplinary, opening and future
 - ▣ A topical school (broad spectrum): 1 week (~ 30h).
 - ▣ 1 "Long module": 30h & 2 "Short modules": 2 x 15h.
 - ▣ Training in ethics and deontology.
- teaching gives 10h per 64h teaching
- Certificate delivered at the end of the PhD

After the PhD

Over 10 years

- 30% research permanent position in France (research + teaching, engineer.)
- 25% permanent position abroad in research (Eng. & management, ESO, ESA)
- 40% private positions (data science, scientific computing, instrumentation,...)
- 5% teaching, scientific diffusion, other

Contact us

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



@ED_AAIF

laurent.verstraete@universite-paris-saclay.fr