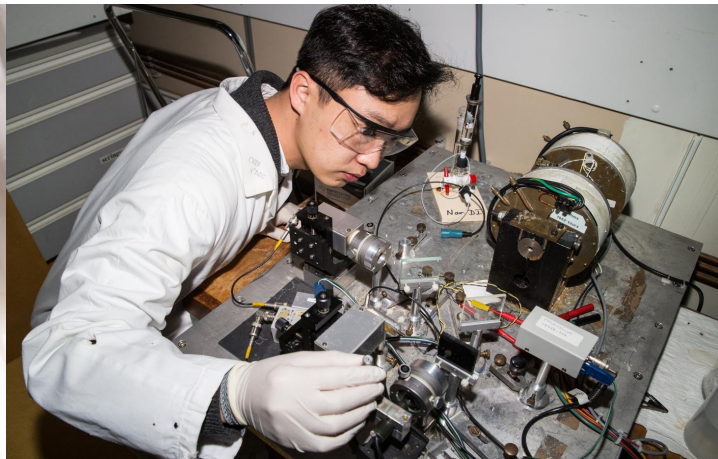
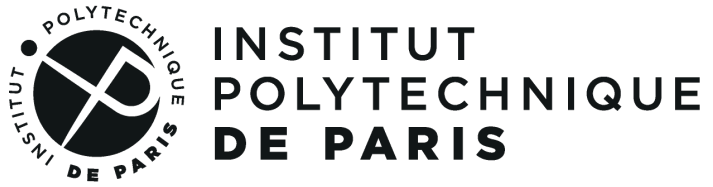


The IP Paris Doctoral School

Matthew Nguyen
December 6th, 2022



The IP Paris Doctoral Program

Key numbers

32

Laboratoires

853

PhD Students

800

Researchers and Professors

550

HDRs

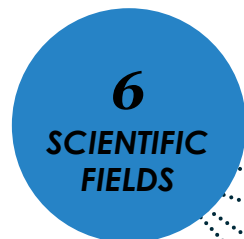
46%

Foreign PhD Students

29%

Women

- Multidisciplinary Doctoral School
- Interdisciplinary research is encouraged!



Economy, Management, and Social Sciences

Biology and Chemistry

Information, Communications, Electronics

Computer Science, Data and Artificial Intelligence

Engineering, Mechanics and Energy

Physics

Physics includes theoretical and experimental physics of the **two infinities**, in strong interplay with lasers and plasmas. Light and matter are also at the core of condensed matter sciences, nanoscience and nanotechnologies, which lead to essential breakthroughs in various fields such as electronics, communications and energy as well as biology and medicine.



Coordinators: Davide Boschetto (ENSTA), Marie-Claire Schanne-Klein (X)
& **Matthew Nguyen (X)**

PhD specialties: Optics, Laser and Plasma; **Astrophysics**; Condensed Matter Physics; **Particle Physics**; Quantum Physics

Laboratories: **CPHT**, IPVF, **LLR**, LOA, LOB, LPP, LULI, OMEGA, PICM, PMC

Institutions:



Finding a PhD @ IP Paris

The official instructions

<https://www.ip-paris.fr/en/education/phd-programs>

There are two ways to enrol for a doctorate at IP Paris:

- Get into contact with a researcher/professor from one of the IP-Paris laboratories, develop in collaboration with him/her a PhD project and discuss funding possibilities. This is generally done in the middle of the M2 year, when choosing research internships. Once a few compulsory documents have been collected (thesis project, CV, M2 grades, letter of support from the thesis supervisor), one must obtain the agreements from the director of the laboratory and the director of the doctoral school. Then the application can be deposited on ADUM.

- Consult the thesis proposals of IP Paris schools, some of which are open for applications:
 - [École polytechnique](#)
 - [ENSTA Paris](#)
 - [ENSAE Paris](#)
 - [Télécom Paris](#)
 - [Télécom SudParis](#)
 - [All PhD Topics at ED IP Paris](#)
 - [All PhD Topics at EDMH](#)



Note that not all offers have already appeared on the IP Paris page
Rather you have to go to the pages of the relevant labs, which for you are
CPHT (theory) and LLR (experiment)

<https://llr.in2p3.fr/les-offres-m2-theses-2023>

<https://www.cpht.polytechnique.fr/?q=en/node/163>

Thesis offers at LLR

Home / Internships, Thesis & Teaching / M2/Thesis /

<https://llr.in2p3.fr/les-offres-m2-theses-2023>

M2, Thesis proposals (2023)

24 November 2022

M2 internship and thesis proposals at LLR in 2023

Experiment	Title	Details
Fermi ✓ HESS ✓ CTA ✓	Multi messenger transient gamma-ray astrophysics <i>PhD thesis</i>	contact : Deirdre Horan email ✉ contact : Stefen Fegan email ✉ contact : Mathieu de Naurois email ✉
HESS ✓ CTA ✓	Diffuse Very-High-Energy gamma-ray Emission in the LMC with HESS <i>PhD thesis</i>	contact : Mathieu de Naurois email ✉
HESS ✓	Very high energy gamma-ray emission from M87 and its environs with HESS and CTA <i>PhD thesis</i>	contact : Mathieu de Naurois email ✉
LHCb ✓	Characterizing the color screening mechanism of the Quantum Chromodynamics with the LHCb experiment <i>PhD thesis</i>	contact : Emilie Maurice email ✉
CMS ✓	Reconstructing long-lived particles in the CMS High-Granularity Calorimeter at the Level-1 trigger <i>M1/M2 Internship</i>	contact : Jean-Baptiste Sauvan email ✉
CMS ✓	Constraining new physics in CMS diboson measurements using effective field theory <i>M2/PhD</i>	contact : Andrew Gilbert email ✉



Download

- [2023_-_lmc_diffuse_emission.pdf](#) (PDF - 109.5 kb)
- [2023_-_m87_and_its_environs.pdf](#) (PDF - 180.4 kb)
- [lhcbthesissubject2023-2.pdf](#) (PDF - 98.2 kb)
- [internship_subject_sauvan1-m2.2023-2.pdf](#) (PDF - 148.1 kb)
- [internshipproposal2023.pdf](#) (PDF - 184.2 kb)

Internships, Thesis & Teaching

L3/M1 Internships

∞ M2/Thesis

∞ M2, Thesis proposals (2023)

M2, Thesis proposals (2022)

Thesis in progress

Teaching

Funded!

[Multimessenger transient gamma-ray astrophysics](#)

[LMC diffuse emission with HESS](#)

[M87 and its environs with HESS and CTA](#)

[Color screening in QCD with LHCb](#)

[Level-1 trigger for the HGCal for CMS](#)

Funded!

[Dibon measurements for effective field theory with CMS](#)

Thesis competition (concours)

Apply here:

<https://www.ip-paris.fr/education/doctorat>

Dossier includes

- Signed candidature document
- Letter of motivation
- Thesis project
- Copy of diploma / grades
- 2 letters of recommendation

Key dates

Early admission deadline	February 15 th
Early admission results	Before end March
Regular admission deadline	April 15 th
Interviews	May 9 – 22 nd
Results	June 3 – 4 th

Audition / interview

- Jury of ~8 physicists from all sub-fields
- 10 – 15 minute presentation: summary of CV, prior research, thesis project & motivation

Concours

- A few projects are funded at the early admission deadline (*appel anticipé*)
- The rest pass automatically to regular admission (*concours general*)
- There is then a pre-selection, with most candidates passing to the audition stage

Take home messages

- Excellent opportunities exist for PhD research at IP Paris
- **These opportunities are open to NPAC students**
- I highly encourage you to directly contact potential internship advisors ASAP
- Also feel free to contact me directly: Matthew.Nguyen@cern.ch
- Some advice:
 - Explore several possibilities to better understand the offers
 - Discuss plans for financing the PhD thesis w/ potential advisors

