

Pedro Figueira | Curriculum Vitae

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Research Summary

My research focuses mainly on **extrasolar planet detection and characterization**, followed by the study of **stellar physics** and the development of **astronomical instrumentation**. During my career I have gathered considerable experience on astronomical observations and team coordination.

Professional & Academic background

Positions

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| Research and Teaching Assistant & Euler Telescope Coordinator | |
| + University of Geneva | Since March 2022 |
| Staff Astronomer & Instrument Scientist | |
| + ESO Chile, Paranal Observatory | February 2018–February 2022 |
| Invited Assistant Professor | |
| + University of Porto | October 2015–July 2017 |
| Investigador FCT | |
| + IA/CAUP | January 2014–January 2018 |
| Advanced Post-Doc for ExoEarths ERC project | |
| + CAUP | May 2010–December 2013 |

Academic Background

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|---|-----------|
| PhD in Astrophysics, supervised by Prof. Michel Mayor and Prof. Francesco Pepe | |
| + University of Geneva, Observatory of the University of Geneva | 2006–2010 |
| BSc in Physics, with specialization in Astronomy & Astrophysics | |
| + University of Lisbon | 2002–2005 |

Research Summary

Publications & Scientific Communications

- + 215 Publications in refereed journals; *h*-index of 56, 11k+ citations;
- + 69 talks at conferences and institutes, 16 of which invited/review talks at international conferences;
- + Organization as SOC/LOC member of four international conferences/meetings;
- + Contribution to 46 non-refereed conference proceedings, book chapters, or white papers;
- + Scientific Section Editor for the [Handbook of Exoplanets](#) (Springer, 2018); 2nd edition at production stage.

My updated ADS publication library can be found [here](#).

Observing Experience

- + Extended observing experience gathered during four years at ESO Paranal observatory as Staff Astronomer, and on 25 observing missions in state-of-the-art observatories as visiting observer;
- + PI / Co-I of 57 accepted observing proposals of different program types (regular, GTO, DDT, TOO).

Coordination & Management

Scientific Coordination

- + Head of the Portuguese **SPIRou** team (2010-2021): Returning to Portugal after my PhD thesis, I coordinated a team of researchers from several scientific fields (star formation, exoplanets, stellar physics) and together we secured funding for our institutional participation in the SPIRou instrument consortium;
- + Working Group (WG) coordinator for **ESPRESSO**'s Guaranteed Time of Observations (GTO) (2018-2021): I was responsible for the WG dedicated to the instrument's primary scientific goal of detecting an Earth-mass planet orbiting inside the habitable zone around a G, K, or M star. As a team, we started and executed most of the GTO program with several breakthrough scientific results;
- + Co-PI of the **HELIOS** solar telescope and Co-Project Scientist of the **NIRPS** spectrograph;
- + **Institutional project funding**: I was PI of 3 funded projects (for a total of 300K€) and Co-I of 8 others awarded by the Portuguese national funding agency *Foundation for Science and Technology* (FCT).

Team management

- + **ESPRESSO instrument scientist at ESO** (2018-2021): I headed a team with approximately 20 researchers, engineers, computer scientists, and other colleagues of varied expertise. Together we put in operations the state-of-the-art ESPRESSO spectrograph while keeping a remarkably low technical downtime of ~1 % ;
- + **Euler Telescope Coordinator** at Observatory of Geneva (since 2022): I am overseeing approximately 40 observers from two institutes across 10 different observing programs.

Teaching & Mentoring

Teaching

- + lecturer at University of Porto (2015-2017) and CESPU university-level private institute (2013-2016);
- + invited lectured for MSc-level classes at Lisbon's School of Social Sciences and Humanities (2015-2018);
- + participation in seven schools or summer schools as lecturer (2009-2016).

Mentoring & Supervision

- + supervisor of four Ph.D thesis and co-supervisor of four other;
- + supervisor of two M.Sc. thesis, two M.Sc.-level fellowships, and co-supervision of a third one;
- + supervisor of three undergraduate student projects;
- + supervisor of one Post-Doc grant;
- + reviewer for two M.Sc. thesis and one Ph.D. thesis;
- + participation in mentoring programs of PhD students at CAUP and Research Fellows at ESO-Chile.

Evaluation Panels and Refereeing

- + Evaluation of observing proposals for the ESO OPC and external advisor for OPTICON & NASA;
- + Evaluation of project funding for four national agencies and the European Research Council (ERC);
- + member of the ESO hiring committee for Fellows and Ph.D students (FSSC);
- + member of several hiring committees for Ph.D.s and Post-Docs at Institute of Astrophysics (IA, Portugal);
- + Frequent referee requests for the major journals; *PASP* award of Outstanding Reviewer in 2017.

Science Communication

In my understanding, Science Communication is a central responsibility of every researcher, and I do my best to reach out and connect to the non-scientific community.

- + Authorship of the book *Astro Homus*, a Portuguese Directorate-General of Arts-funded project;
- + Co-author of five ESO Messenger and one CAP journal articles;
- + Participation in two books, two documentaries, and six TV shows;
- + Frequently invited to talks, round tables, and discussions on Exoplanets.

For additional information on my projects check [my webpage](#).

Languages

- + *Portuguese*: native language;
- + *English*: proficient at speaking and writing, IELTS Academic grade 8.5/9 (Nov 2021);
- + *French*: proficient at speaking, independent-level writing;
- + *Spanish*: proficient at speaking, independent-level writing.