# Filipe Pereira

Curriculum Vitæ

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## EDUCATION

**Faculty of Sciences of the University of Porto**, Porto, Portugal

- Doctoral Programme in Astronomy — Oct 2016 – Ongoing
  - Completed courses: Exoplanets; Asteroseismology; Jets
- M.Sc. in Astronomy — Oct 2014 – Oct 2016
- Bachelor's Degree in Astronomy — Sep 2011 – Sep 2014

## OTHER CURRICULAR ACTIVITIES

**IVth Azores International Advanced School in Space Sciences**, Azores, Portugal — Jul 2016

- Completed various courses totaling 49 hours.
- Included courses in: Stellar Modelling, Theory of Stellar Oscillations, Data Analysis in Asteroseismology, Exoplanetary Science, Analysis of Photometric Time Series

**Machine Learning Course from Stanford University** — Sep 2015 – Dec 2015

## ACADEMIC RESEARCH WORK

**Msc Dissertation** — Oct 2016 – Oct 2015

- Thesis: Development of automatic tools for measuring acoustic glitches in seismic data of solar-type stars
- Supervisor: Dr. Mário João Monteiro
- Research areas: Asteroseismology, acoustic glicthes, Fortran

**Undergradute Research Project** — Feb 2014 – Jul 2014

- Project: Study of the mizimization function in the ARES+MOOG procedure
- Supervisor: Dr. Sérgio Sousa
- Research areas: Spectroscopic Parameters, iron line abundances, Python

## RESEARCH ACTIVITIES

**Research Internship** — Oct 2017 – Ongoing

- Project: Characterizing and modelling red giants
- Supervisor: Dr. Margarida Cunha
- Research areas: gaussian processes, grid-based modelling, red-giant stars

**PEEC (Extra-Curricular Research Project)** — Oct 2013 – Jul 2015

- Project: Testing the applicability of using titanium line abundances to determine spectroscopic stellar parameters, especially surface gravity, using the ARES and MOOG tools
- Supervisor: Dr. Sérgio Sousa
- Research areas: Spectroscopic Parameters, titanium line abundances, Python

**Seismology of the Sun and the Distant Stars 2016, Joint TASC2 & KASC9 Workshop – SPACEINN & HELAS8 Conference**, Azores, Portugal — Jul 2016

**1st TESS Data for Asteroseismology workshop - T'DA 1**, Birmingham, England — Oct 2016

**2nd TESS Data for Asteroseismology workshop - T'DA 2**, Aarhus, Denmark — Apr 2017

- Will participate in the workshop.

**Member of the IA Stars & Planets Research Team**

- Participate in bi-weekly meetings with the Asteroseismology Team
- Participate in monthly meetings with the Exoplanets Team

**Member of CAUP (Center for Astrophysics of the University of Porto)**

- Attend regular seminar in various Astronomy topics presented by both local and visiting researchers

## SCIENTIFIC RESULTS

**PROCEEDINGS**

1. Pereira L.F.R., Faria J.P.S., and Monteiro M.J.P.F.G., 2016, SIGS - Seismic Inferences for Glitches in Stars, in Proceedings for the *Seismology of the Sun and the Distant Stars 2016* Conference, arXiv, submitted.

**POSTERS**

1. Pereira L.F.R., Faria J.P.S., and Monteiro M.J.P.F.G., 2016, SIGS - Seismic Inferences for Glitches in Stars, in *Seismology of the Sun and the Distant Stars 2016* Conference.

**REPORTS**

1. Msc Grant Final Report
2. PEEC Project Report

**GRANTS**

Development of automatic tools for measuring acoustic glitches in seismic data of solar-type stars Oct 2015 – Jun 2016

- Project: SPACEINN (FP7-SPACE-2012-312844)
- Supervisor: Dr. Mário João Monteiro
- Institution: Centro de Astrofísica da Universidade do Porto (CAUP)
- Grant: ~7000 EUR

Characterizing and modelling red giants Jan 2017 – Dec 2017

- Project: CIAAUP-09/2016-BI
- Supervisor: Dr. Margarida Cunha
- Institution: Centro de Astrofísica da Universidade do Porto (CAUP)
- Grant: ~12000 EUR

**SCIENTIFIC AFFILIATIONS**

**Sociedade Portuguesa de Astronomia**, Portugal

- Member 2012 – Present

**LANGUAGES**

- Portuguese: Native language.
- English: Fluent (speaking, reading, writing), C1 Level.
- Spanish: Intermediate (reading, speaking); basic (writing).

**COMPUTER SKILLS**

- Basic Knowledge: Java, MySQL, C, Linux, R
- Intermediate Knowledge: LaTeX, Python, MATLAB, Fortran

**INTERESTS**

Computer Science, Cinema, Basketball, Voleyball