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; Data Analysis
- 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

Research Seminar in Astronomy — Jul 2017 – Oct 2016
- Project: Testing gaussian process regression for red-giant granulation modelling
- Supervisor: Dr. Margarida Cunha
- Research areas: red-giant stars, granulation, gaussian processes, python

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 2016 – 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

Tessting Stellar Astrophysics, Joint TASC3 & KASC10 Workshop, Birmingham, UK — Jul 2017

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

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., Campante T.L., Cunha M.S., Santos N.C. and Barros S.C.C., 2017, Testing gaussian process regression for red-giant granulation modelling, in *Tessting Stellar Astrophysics* Joint TASC3 & KASC10 Workshop.
2. 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
3. Research Seminar in Astronomy 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