

Etienne BONNASSIEUX

DATE OF BIRTH: 19/10/1991 | EMAIL: etienne.bonnassieux@obspm.fr
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EDUCATION

- 2015-2018 | **PhD in Astrophysics at Observatoire de Paris & Rhodes University**
“Statistical Analysis of the Radio-Interferometric Measurement Equation, a derived adaptive weighting scheme, and applications to LOFAR-VLBI observation of the Extended Groth Strip”
Partnership: LESIA at the Observatoire de Paris (ED127) & RATT-RU, SKA-SA
- 2014-2015 | **M2R Astronomie, Astrophysique et Ingénierie Spatiale**
Equivalent to Msc in Astrophysics
Partnership : Observatoire de Paris, UPMC, Diderot, Orsay, ENS Ulm
- 2013-2014 | **M1 Astronomie et Astrophysique, ”Sciences de l’Univers et Technologies Spatiales”**
- *Observatoire de Paris*
First year of French 2-year Masters. Graduated ”Mention Bien” (honours).
- 2009-2013 | **Bsc (2:2, Hons) in Astrophysics - University of Edinburgh**
Bachelors of Science, graduated with Honours.
- 2008-2009 | **IB Diploma - Bahrain School**

RESEARCH EXPERIENCE

- OCT. 2018 - PRESENT | Post-doctoral Fellowship on galactic cluster science at low frequencies at the University of Bologna, under the supervision of Annalisa Bonafede.
- Radio Interferometry
Calibration | During the course of PhD, gained expertise in interferometric calibration techniques and algorithms. This includes use of next-generation tools such as killMS along with older software e.g. Casa or NDPPP, but also work on GPR gain fitting with Landman Bester & Ulrich Charmel.
- Imaging | Also gained expertise in imaging techniques and algorithms, including the use of & DDFacet and wsclean along with older software e.g. Casa.

PUBLICATIONS

- Nov. 2017 | published at Astronomy & Astrophysics: [On the variance of radio interferometric calibration solutions](#)
<https://arxiv.org/abs/1711.00421>

WORK EXPERIENCE

- SEP 2011 | **Freelance translator at ISTE Ltd.**
- FEB 2012 | Translation projects from French to English (mostly engineering books, ranging from plasma physics to machining). Editing done in Microsoft Word.

TEACHING & SCIENTIFIC OUTREACH

SEP 2017 - JUL 2018	Tutored in the Paris Observatory DU-LU course Supervised four students as part of an online course, usually teachers or amateur scientists in the workforce.
SEP 2015 - JUL 2016	Of my six students, four successfully carried on to other programs in the DU; two dropped during the year for personal reasons.
SEP 2017	Lectured for NASSP Taught principles of interferometry: two 1-hour lectures on visibilities, UV-plane, PSF, and ZVC theorem. Course was aimed at honours astrophysics students at UCT.
SEP 2016	Same as above, but aimed at masters astrophysics students at UCT: content was at a higher level. This also entailed writing and marking a homework question.
JAN 2017 - APR 2017	Lectured Physics 101 Introductory undergraduate course in basic mechanics, aimed non-physicist undergraduates. Of 60-odd students, 15 were also in my tutorial group.
SEP 2017	Wrote and organised a pyrap tutorial during 3GC4 Wrote an ipython notebook tutorial on pyrap, a python library. Easily converted into scripts, it has been a very popular tutorial with colleagues over the years.
SEP 2017	Rewrote “Visibility Space” chapter of <i>Fundamentals of Interferometry</i> This is an online coursebook written in multiple ipython notebooks, fruit of years of labour from many contributors. Rewrote Julien Girard’s work. Link here .
SEP 2015 - JUL 2016	Paris Observatory “Parrainage” Paris Observatory’s outreach program, organised by Alain Doressoundiram. I helped teachers (primary-school, middle-school) organise scientific demonstrations.

COMPUTER SKILLS

Experienced with working under both Linux and Windows environments.
Proficient: FORTRAN 70/90/95, C , BASH, LATEX, PYTHON

LANGUAGES

FRENCH : Mother Tongue
ENGLISH : Mother Tongue
SPANISH : Proficient

INTERESTS AND ACTIVITIES

Student representative for the Astronomy and Astrophysics Masters students at the Observatoire de Paris (and joint establishments) in 2014-2015, student representative for Physics and Astrophysics undergraduates in my year at Edinburgh University in 2010-2011, and on the committee of the Edinburgh Science-Fiction and Fantasy student society in 2010-2011 and 2011-2012 (Librarian, then President, respectively), as well as the Edinburgh University Wargames Society (treasurer).