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CURRENT AND PREVIOUS POSITIONS

June 2020 – Lecturer in Physics and Astronomy, University of Exeter, UK
2017 – 2020 NASA Sagan Fellow, Harvard University, USA
2015 – 2017 Postdoctoral Fellow, Harvard University, USA
2015 Postdoctoral Research Fellow, University of St Andrews, UK

EDUCATION

2019 **Certificate in Sustainability**, Harvard University Extension School, USA
2015 **PhD in Astrophysics**, University of St Andrews, UK
2011 **Masters of Science in Physics**, Imperial College London, UK

SELECTION OF MAJOR ONGOING SCIENCE COLLABORATIONS

2013– Collaborator, HARPS-North Science Team
2016– Lead coordinator, HARPS-N Solar Telescope Team
2017– Member, ESA/PLATO, Working Group 115100 on Astrophysical Noise
2019– Collaborator, *Terra Hunting Experiment*

SELECTED SERVICE IN THE SCIENTIFIC COMMUNITY

2019– I currently co-chair an Analysis Group as part of a joint NASA-US National Science Foundation Working Group to design a decadal roadmap to detect Earth-like planets.
2018– Reviewer for NASA Future Investigators (FINESST) committee
July 2017 Jury member for the MSc defense of Leonardo dos Santos, University of São Paulo, Brazil
2015– Journal referee (Nature Astronomy, MNRAS, A&A, ApJ, ApJ Letters)

SUPERVISION OF STUDENTS

2017– **Co-supervisor, PhD student:** Timothy W. Milbourne, Harvard University, USA
2015 **Co-supervisor, Master Student:** Helen A.C. Giles, University of St Andrews, UK
2014–2019 **4 undergraduates in summer research projects:** Laura Moran (University of St Andrews, UK), Michael L. Palumbo (University of North Carolina, USA), Anthony Iampietro (Millersville University, USA), Dakota Tyler (Cincinnati State College, USA)

ORGANISATION OF SCIENTIFIC MEETINGS

March 2019 Co-organiser of a splinter session at the *Extreme Precision Radial Velocity International Workshop IV*, Grindelwald, Switzerland
Sept. 2018 Member of the Scientific Organising Committee of the Workshop: *Observing the Sun as a Star: would we find the solar system if we saw it?*, Göttingen, Germany
April 2017 Co-leader of a discussion session: *"The impact of stellar activity in exoplanet searches"*, UK Community Exoplanet Meeting, St Andrews, UK

AWARDS AND PRIZES

- 2017 NASA Sagan Fellowship (application pressure: 1 to 35)
- 2015 Springer Thesis Award: *Recognizing Outstanding Ph.D. Research*
My PhD thesis was nominated as outstanding by two internationally-recognised specialists, resulting in publication by Springer International Publishing AG Switzerland in the *Springer Thesis Series*. It has been downloaded over 1375 times since its publication online in 2016.
- 2007 Prix de la Vocation Scientifique et Technique des Filles (€1,000)
“Prize for scientific and technological excellence for female students”
Awarded by the Ministère du Travail, des Relations Sociales, de la Famille et de la Solidarité, France
- 2007 French Baccalauréat Mention Très Bien with Félicitations du Jury

SUMMARY OF PUBLICATION RECORD

40 published peer-reviewed articles, including:

- 11 first-author or major contribution publications
- 11 publications without my PhD supervisor as co-author

1922 citations, including 356 citations on first-author publications (source: Google Scholar)

h-index: 19

Revolutionary technique to determine masses of small exoplanets: I developed a new method based on Gaussian process regression and Bayesian model comparison to detect exoplanets and determine their masses in the presence of correlated noise arising from stellar variability. This technique sets the state of the art for determining exoplanet masses.

- *Planets and Stellar Activity: Hide and Seek in the CoRoT-7 system*, **R.D. Haywood** et al., MNRAS, 443, 3 (2014). **(233 citations)**

First systematic radial-velocity campaign of the Sun: I conducted these observations of the Sun seen as a distant, point-like star by observing sunlight reflected off the bright asteroid Vesta. I directly identified the physical process that dominates the Sun's intrinsic radial-velocity variability.

- *The Sun as a planet-host star: Proxies from SDO images for HARPS radial-velocity variations*, **R.D. Haywood** et al., MNRAS, 457, 4 (2016). **(87 citations)**

Precise and accurate mass determinations for some of the small planets most amenable to atmospheric characterisation: I applied the technique that I developed (Haywood et al., 2014) to determine robust masses for these key exoplanets.

- *A temperate rocky super-Earth transiting a nearby cool star*, J.A. Dittmann, J.M. Irwin, D. Charbonneau, X. Bonfils, N. Astudillo-Defru, **R.D. Haywood** et al., Nature, 544, 7650 (2017). **(183 citations)**
- *Kepler-21b: A rocky planet around a V=8.25 magnitude star*, M. López-Morales, **R.D. Haywood**, et al., 2016. AJ, 152, 6 (2016). **(52 citations)**
- *Determining the Mass of Kepler-78b with Nonparametric Gaussian Process Estimation*, S. K. Grunblatt, A. W. Howard & **R.D. Haywood**, ApJ, 808, 127 (2015). **(71 citations)**

SEMINARS AND CONFERENCE TALKS

65 academic presentations since 2012:

- Talks at international conferences/workshops: 43, including 16 invited
- Seminars at research institutes worldwide: 22

LANGUAGE SKILLS

English & French: native speaker