# **Curriculum Vitae for Ulrike Heiter**

Division of Astronomy and Space Physics, Department of Physics and Astronomy, Uppsala University, Box 516, 751 20 Uppsala, Sweden; phone: +46 18 471 5982; e-mail: ulrike.heiter@physics.uu.se; www: http://www.astro.uu.se/~ulrike

## Academic degrees

2006	Docent in Astronomy (Uppsala University, Sweden)
2000	PhD degree in Astronomy (University of Vienna, Austria)
1996	Master of Science degree in Astronomy (University of Vienna, Austria)

## Present position

2016-	Senior Lecturer in Astronomy, specialization Physics of Planetary Systems
	(Universitetslektor), Department of Physics and Astronomy, Uppsala University

### Past positions

2008-2016	Researcher, Department of Physics and Astronomy, Uppsala University
2003-2007	Assistant Professor in Observational Astrophysics (Forskarassistent), Department of Astronomy and Space Physics, <i>Uppsala University</i>
2001–2003	Postdoctoral position, Department of Astronomy, Case Western Reserve University, Cleveland, OH, USA

### Supervision of doctoral degrees

Terese Olander, Uppsala University, PhD expected Dec 2023 (main supervisor)

Ansgar Wehrhahn, Uppsala University, PhD expected 2022 (co-supervisor)

Alvin Gavel, Uppsala University, PhD expected 2021 (co-supervisor)

Sara Lindgren, Uppsala University, PhD Dec 2017 (main supervisor)

Thomas Nordlander, Uppsala University, PhD Mar 2017 (co-supervisor)

Sergi Blanco Cuaresma, University of Bordeaux, PhD 2014 (secondary mentor)

Anna Önehag, Uppsala University, PhD 2011 (main supervisor)

#### Teaching commitments on bachelor and master level

2013-	Supervision of bachelor and master thesis projects
2018, 2020	Course organiser and teacher for Discoveries in our Planetary System (5 credits)
2019	Course organiser and teacher for Celestial Mechanics (5 credits)
2010 – 2019	Course organiser and teacher for <i>Physics of Planetary Systems</i> (10 credits) and
2010 – 2017	The Physics of Stars (10 credits)
2010 – 2017	Mechanics (5 credits, teacher)
2005 – 2019	Contribution to Physics orientation courses

### Scientific interests

- Observing and analysing spectra of low-mass stars and planetary host stars
- Studying the formation and evolution of planetary systems
- Studying the formation and evolution of the Milky Way galaxy

#### Presentation of scientific results

- Wrote and co-authored ~100 publications in refereed journals since 1997, with more than 10 000 citations (~4100 when excluding Gaia Data Release papers), h-index 43
- Scientific or public **talks** (about 5 per year) at international conferences, project meetings, Astronomy departments, summer schools, and public outreach events

## Research grants awarded

2008 – 2018	Main applicant for research grants from SNSA (Rymdstyrelsen) for			
	projects related to the $Gaia$ and $PLATO$ missions ( $\sim 13$ MSEK, $85\%$			
	salary until 2014, 50% from 2015, PhD student from 2018)			
2012 – 2020	Co-applicant for SNSA projects (PhD student funding)			
2006–2010	Research, teaching, and travel grants from Uppsala University, VR, Royal Swedish Academy of Sciences (KVA), and European Science Foundation			

# Appointments

2019 – 2021	Member of the National Committee for Astronomy (KVA)	
2019 – 2021	Member of Naturvetenskapliga utbildningsnämnden (Uppsala University)	
2016-2019	Member of the $E$ - $ELT$ $Sub$ - $Committee$ of ESO	
2015–present	Member of Work Packages 122, 125, 127 (Stellar Science) in the $PLATO$ Mission Consortium	
2012–present	Instrument Scientist in the CRIRES <sup>+</sup> Consortium	
2011–present	Co-I and Builder of the Gaia-ESO Public Spectroscopic Survey	
2006-present	Member of the "Data Processing and Analysis Consortium" for the ESA space mission $Gaia$	
2009–2014	Work Package leader in EU-FP7 projects <i>VAMDC</i> and <i>SUP@VAMDC</i> ("Virtual Atomic and Molecular Data Center")	
2010, 2014	Hubble Space Telescope Proposal Review Panel Member	
2009, 2010,	2009, 2010, Visiting professor (1 month each year),	
2014 – 2016	Université Bordeaux 1, and Université Nice Sophia Antipolis, France	
2007-present	Member of PhD examination committees, Uppsala University, Lund University, Stockholm University, Chalmers, University of Porto, University of Bordeaux, Aarhus University (about once per year)	

## Observing experience

- About 100 visiting observing nights at European Southern Observatory (ESO, La Silla), Observatoire de Haute Provence, Osservatorio Astronomico di Padova, Kitt Peak National Observatory (Tucson, Arizona), McDonald Observatory (Fort Davis, Texas), CHARA Array (Mt. Wilson, California, remote operations from Nice, France).
- More than 100 hours of service observing time obtained at ESO Paranal, Telescopio Nazionale Galileo (La Palma) and Télescope Bernard Lyot (Pic du Midi).

# Publications by U. Heiter

Ten selected publications are listed below, most recent first, all are peer-reviewed. The number of citations is given according to ADS (the SAO/NASA Astrophysics Data System, retrieved 2020-04-19).

- Jofré, P., Heiter, U., and Soubiran, C., Accuracy and Precision of Industrial Stellar Abundances, 2019, Annual Review of Astronomy and Astrophysics 57, 571; Number of citations: 20
- 2. Gaia Collaboration, Brown, A. G. A., Vallenari, A., Prusti, and 451 co-authors, Gaia Data Release 2. Summary of the contents and survey properties, 2018, Astronomy and Astrophysics 616, A1; Number of citations: 2763
- 3. Lindgren, S. and **Heiter, U.**,

  Metallicity determination of M dwarfs. Expanded parameter range in metallicity and effective temperature,

  2017, Astronomy and Astrophysics 604, A97; Number of citations: 15
- 4. Miglio, A., Chiappini, C., Mosser, B., and 102 co-authors, *PLATO as it is : A legacy mission for Galactic archaeology*, 2017, Astronomische Nachrichten 338, 644; Number of citations: 41
- 5. Lindgren, S., **Heiter, U.**, and Seifahrt, A., Metallicity determination of M dwarfs. High-resolution infrared spectroscopy, 2016, Astronomy and Astrophysics 586, A100; Number of citations: 20
- Tinetti, G., Drossart, P., Eccleston, P., and 352 co-authors, The EChO science case, 2015, Experimental Astronomy 40, 329; Number of citations: 7
- 7. **Heiter, U.**, Jofré, P., Gustafsson, B., and 3 co-authors, Gaia FGK benchmark stars: Effective temperatures and surface gravities, 2015, Astronomy and Astrophysics 582, A49; Number of citations: 140
- 8. **Heiter, U.**, Lind, K., Asplund, M., and 7 co-authors, *Atomic and molecular data for optical stellar spectroscopy*, 2015, Physica Scripta 90, 054010; Number of citations: 76
- 9. Jofré, P., **Heiter, U.**, Soubiran, C., and 22 co-authors, *Gaia FGK benchmark stars: Metallicity*, 2014, Astronomy and Astrophysics 564, A133; Number of citations: 173
- Heiter, U., Soubiran, C., Netopil, M., and Paunzen, E.,
   On the metallicity of open clusters. II. Spectroscopy,
   2014, Astronomy and Astrophysics 561, A93; Number of citations: 71

The total number of publications in different categories are listed in the table below. Concerning open access, 68 of the peer-reviewed articles are published in the journal Astronomy & Astrophysics, which allows immediate self-archiving of published articles in a public depository. The journal Annual Review of Astronomy and Astrophysics provides an ePrint URL allowing free access to nonsubscribers. The articles published in all other journals except for Physica Scripta become freely accessible one year after publication. In total, all publications are freely accessible as of 2020-04-19 (except for two of the conference contributions).

Category	Publications
1. Peer-reviewed articles	95
2. Peer-reviewed conference contributions	7
3. Review articles, book chapters, books	2
4. Patents	none
5. Open access databases	4
6. Popular scientific articles or presentations	2

#### HTML links

## Full lists of peer-reviewed articles at ADS

- Peer-reviewed articles and review articles:
  - https://ui.adsabs.harvard.edu/search/q=author%3A(%22heiter%2C%20u%22)%20% 20property%3A%22refereed%22%20NOT%20bibstem%3A(CoSka%20OR%20PhST%20OR% 20PhyS)%20%20OR%20bibcode%3A(%222007IAUS...241....47G%22)&sort=citation\_count% 20desc%2C%20bibcode%20desc
- Peer-reviewed conference contributions:

https://ui.adsabs.harvard.edu/search/q=author%3A(%22heiter%2C%20u%22)%20bibstem%3A(JPhCS%200R%20CoSka%200R%20PhST%200R%20PhyS)&sort=citation\_count%20desc%2C%20bibcode%20desc

### Open access databases

- The Gaia FGK Benchmark Stars Library of high resolution and high signal to noise ratio stellar spectra: http://www.blancocuaresma.com/s/benchmarkstars/
- The VALD database of atomic and molecular data: http://vald.astro.uu.se/
- The FGK Stars Spectral Library: http://bifrost.astr.cwru.edu/FGKasp/dwarfs.php
- Vienna New Model Grid of Stellar Atmospheres: http://www.univie.ac.at/nemo/

## Popular scientific publications

- Popular article on Gaia: Att mäta en miljard stjärnor David Hobbs, Lennart Lindegren, Ulrike Heiter och Andreas Korn, Populär Astronomi 2013, nummer 3,
  - http://www.popast.nu/wp-content/uploads/2013/09/2013\_3\_gaia1.pdf
- Popular web page on stellar spectroscopy: Rainbows in Starlight http://www.astro.uu.se/~ulrike/Spectroscopy.html