

# Curriculum Vitae: Steve Ertel

(last updated: Jan. 23<sup>th</sup> 2016)

Age: 31 (Date of Birth: Sep. 25<sup>th</sup> 1984) • Nationality: German • Marital status: married

European Southern Observatory (ESO)  
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## RESEARCH AREAS

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- Formation and evolution of planetary systems (including post-main sequence)
- Modeling and observations of debris disks and exozodiacal dust
- Optical interferometry
- Direct imaging detection of extrasolar planets

## EMPLOYMENT HISTORY

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From Feb. 2016 on	<b>Steward Observatory</b> , University of Arizona, Tucson, USA Research Associate
Nov. 2013 – Jan 2016	<b>European Southern Observatory (ESO)</b> , Santiago, Chile Postdoctoral research fellow
Mar. 2012 – Oct. 2013	<b>IPAG, Universit Joseph Fourier</b> , Grenoble, France Research Associate, post-doc (CNRS, ANR EXOZODI)
Jan. 2012 – Feb. 2013	<b>IPAG, Universit Joseph Fourier</b> , Grenoble, France Research Associate (CNRS, ANR EXOZODI)
Dec. 2008 – Nov. 2012	<b>ITAP, University of Kiel</b> , Germany Research Associate
Oct. 2007 – Nov. 2008	<b>Thuringian State Observatory</b> , Tautenburg, Germany Research Assistant

## EDUCATIONAL BACKGROUND

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Dec. 2008 – Feb. 2012	<b>ITAP, University of Kiel</b> , Germany: PhD student <b>Feb. 2012:</b> PhD in natural sciences (Dr. rer. nat.) Thesis title: <i>Modeling the spatial structure of debris disks</i>
Nov. 2007 – Nov. 2008	<b>Thuringian State Observatory</b> , Tautenburg, Germany: Diploma student
Sep. 2003 – Nov. 2008	<b>University of Leipzig</b> , Germany: Diploma student (Physics) <b>Nov. 2008:</b> Diploma in Physics (Dipl.-Phys)

## QUALIFICATION & TRAINING

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**Team building** and **project management** sessions organized at ESO Santiago (certified & uncertified)

## RESEARCH EXPERIENCE & SERVICE

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Form Feb. 2016 on	LBTI instrument scientist
Since Feb. 2015	Head of the FEARLESS team (international collaboration)
Aug. 2014 – Jan. 2016	VLT/PIONIER instrument fellow
Nov. 2013 – Jan. 2016	ESO support astronomer at Paranal observatory (VLT1, UT2)
Jul. 2012 – Mar. 2014	Member of the VLT/PIONIER core user group, trained observer
Since Jan. 2012	Member of the EXOZODI team (France, CNRS/ANR, international team)
Jan. 2012 – Nov. 2014	Co-leading the Herschel/DUNES modeling group
Since Dec. 2008	Member of the Herschel/DUNES team (international collaboration)

## AWARDS & HONORS

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Dec. 2012                      **ESO postdoctoral research fellowship**, stipend: ~260.000 EUR

## **OBSERVATIONAL EXPERIENCE**

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VLT/PIONIER	PI, Co-I, visiting astronomer, data reduction & analysis
VLT/PIONIER, AMBER, MIDI	ESO support astronomer, <b>over 100 nights</b>
VLT/XSHOOTER, FLAMES, UVES	ESO support astronomer, <b>over 50 nights</b>
ALMA	PI, Co-I, data reduction & analysis
VLT/SPHERE	PI, Co-I, data analysis
Herschel Space Observatory	Co-I, member of Open Time Key Program, data analysis
VLT/VISIR	PI, data reduction & analysis
VLT/NaCO	PI, visiting astronomer, data reduction & analysis
IRAM-30m	PI, visiting astronomer, pooled visitor and service observations
Hubble Space Telescope	Co-I

## **PUBLICATIONS**

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Major refereed journals	33 papers, 5 as first author
Proceedings, unrefereed	9 papers, 3 as first author
Total number of citations	581 according to SAO/NASA ADS
h-index	15 according to SAO/NASA ADS
Year of first publication	Contributed paper: 2010, first-author paper: 2011

## **PRESENTATIONS**

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Invited talks	6 invited talks since 2012, most recent: <b>Hot dust around MS stars</b> workshop, CalTech, USA, May 2015 <b>Stellar coffee and planetary tea</b> , ESO Garching, Germany, Nov. 2014 <b>MAD workshop 2014</b> , Cerro Calan, Chile, Nov. 2014 <b>AstroKolloquium</b> , FSU Jena, Germany, Feb. 2014
Contributed talks	9 international conferences and workshops, 4 team meetings since 2009
Poster presentations	7 international conferences since 2010

## **CONFERENCE ORGANIZATION**

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Jul. 2015	SOC, chair: <b>Exozodi satellite meeting</b> , Pathways toward habitable planets Bern, Switzerland
Sep. 2014	SOC, session chair: <b>The Herschel debris disk workshop</b> , Madrid, Spain
Jul. 2010	LOC: <b>Chinese-German Workshop on Star and Planet Formation</b> Kiel, Germany
May 2010	LOC: <b>Circumstellar Disks and Planets</b> , Kiel, Germany

## **TEACHING & MENTORING**

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- Lecture "Science with optical interferometry" (lecturer, one lecture/TIO course, ESO)
- Seminar supporting lecture "Mathematical Methods in Physics" (lecturer and seminar organizer, 3 semesters, University of Kiel)
- Seminar supporting lecture "Methods in Astronomy and Astrophysics" (lecturer, mentoring of students, 1 semester, University of Kiel)
- Supervision of undergraduate students (2 projects, University of Kiel)
- Instrument training at VLT (Support and visiting astronomers, Telescope and Instrument Operators)

## **PROGRAMMING & SOFTWARE**

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Programming & scripting	FORTRAN, PYTHON, CASA, ESO-MIDAS, BASH
Office & presentation	LATEX, Open Office Suite, Microsoft Office Suite, HTML
Operating systems	Linux (Ubuntu, Suse, Fedora), Microsoft Windows (up to Windows 7)

# Ten most important publications (last updated: Mar. 27<sup>th</sup> 2015)

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## ARTICLES PUBLISHED BY OUTLETS WITH SCIENTIFIC QUALITY ASSURANCE

- Xu, S., **Ertel, S.**, Wahhaj, Z., Milli, J., Scicluna, P., Bertrang, G. H.-M., 2015, A&A 579, 8:  
*An extreme-AO search for giant planets around a white dwarf. VLT/SPHERE performance on a faint target GD 50*
- **Ertel, S.**, Absil, O., Defrère, D., Le Bouquin, J.-B., Augereau, J.-C., Marion, L., Blind, N., Bonsor, A., Bryden, G., Lebreton, J., & Milli, J., 2014, A&A 570, 128:  
*A near-infrared interferometric survey of debris-disc stars. IV. An unbiased sample of 92 southern stars observed in H-band with VLT/PIONIER*
- Marion, L., Absil, O., **Ertel, S.**, Le Bouquin, J.-B., Augereau, J.-C., Blind, N., Defrère, D., Lebreton, J., & Milli, J., 2014, A&A 570, 127:  
*Searching for faint companions with VLT/PIONIER. II. 92 main sequence stars from the Exozodi survey*
- Marshall, J. P., Kirchschrager, F., **Ertel, S.**, Augereau, J.-C., Kennedy, G. M., Booth, M., Wolf, S., Montesinos, B., Eiroa, C., & Matthews, B., 2014, A&A 570, 114:  
*Interpreting the extended emission around three nearby debris disc host stars*
- Schüppler, Ch., Löhne, T., Krivov, A. V., **Ertel, S.**, Marshall, J. P., & Eiroa, C., 2014, A&A, 567, 127:  
*Collisional modelling of the debris disc around HIP 17439*
- **Ertel, S.**, Marshall, J. P., Augereau, J.-C., Krivov, A. V., Löhne, T., Eiroa, C., Mora, A., del Burgo, C., Montesinos, B., Bryden, G., Danchi, W., Kirchschrager, F., Liseau, R., Maldonado, J., Pilbratt, G. L., Schüppler, Ch., Thébault, Ph., White, G. J., & Wolf, S., 2014, A&A 561, 114:  
*Potential multi-component structure of the debris disk around HIP 17439 revealed by Herschel/DUNES*
- **Ertel, S.**, Wolf, S., & Rodmann, J. 2012, A&A 544, 61:  
*Observing planet-disk interaction in debris disks*
- **Ertel, S.**, et al., 2012, A&A 541, 148:  
*A peculiar class of debris disks from Herschel/DUNES. A steep fall off in the far infrared*
- Löhne, T., Augereau, J.-C., **Ertel, S.**, et al., 2012, A&A 537, 110:  
*Modelling the huge, Herschel-resolved debris ring around HD207129*
- **Ertel, S.**, Wolf, S., Metchev, S., Schneider, G., Carpenter, J. M., Meyer, M. R., Hillenbrand, L. A., & Silverstone, M. D., 2012, A&A 533, 132:  
*Multi-wavelength modeling of the spatially resolved debris disk of HD 107146*