

CURRICULUM VITAE

Harald Kuntschner

Date of Birth: 17th January 1971

Marital Status: Married to Dr. Claudia S. Schattmann–Kuntschner

Children: Carolin A. Kuntschner (born 13 March 2003)
Isabella J. Kuntschner (born 17 September 2005)

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EMPLOYMENT HISTORY:

2013–	<i>ESO Project Scientist:</i> ESO, Garching, Germany Member of ESO faculty as <i>Full Astronomer</i>
2011–2012	<i>ESO Instrument Scientist:</i> ESO, Garching, Germany Member of ESO faculty as <i>Associate Astronomer</i>
2005–2010	<i>ST-ECF Instrument Scientist:</i> ESO, Garching, Germany Member of ESO faculty as <i>Associate Astronomer</i>
2002–2005	<i>ST-ECF Instrument Scientist:</i> ESO, Garching, Germany Member of ESO faculty as <i>Assistant Astronomer</i>
2001–2002	<i>ESO Fellow:</i> ESO, Garching, Germany Independent Research: Galaxy formation and evolution
1998–2001	<i>Senior Research Associate:</i> University of Durham, UK Mentor: Prof. Roger L. Davies Research: Unravelling the star-formation history, and kinematical make-up of nearby early-type galaxies and their globular clusters
1991–1994	<i>Research Assistant:</i> Max-Planck-Institut, Garching, Germany Supervisor: Dr. Roland Diehl Research: Data pre-processing for the gamma-ray telescope COMPTEL aboard the NASA Compton Gamma-Ray Observatory. Mainly in vacation periods.
1990–1991	Military Service, Traunstein, Germany

EDUCATION:

1995–1998	University of Durham, UK Ph.D in Extragalactic Astronomy — December 1998 <i>The Star Formation History of Early-Type Galaxies in the Fornax Cluster</i> Supervisor: Prof. Roger L. Davies Examiners: Prof. James J. Binney and Prof. Richard G. Bower
1991–1995	Ludwig-Maximilians-University, Munich, Germany Pre-Diploma Physics - First Class Degree Diploma Physics (first part) - First Class Degree
1981–1990	Ludwig-Thoma-Gymnasium, secondary school, Prien, Germany Abitur - First Class

AWARDS:

2013	Royal Astronomical Society Group Achievement Award for SAURON project.
2009, 2011	Financial award for exceptional performance at ESO.
2007	Space Telescope Science Institute Achievement Award for supporting the HST/ACS SBC re-calibration.
1999	“Michael Penston Astronomy Prize”, Royal Astronomical Society, UK Second place in the 1999 competition for the best doctoral thesis in Astronomy and Astrophysics, UK
1996–1998	Durham Research Studentship, University of Durham, UK
1995–1996	“North Holland Research Physics Prize”, Physics Dept., University of Durham Scholarship from “Dr.-Carl-Duisberg-Stiftung”, Bayer AG, Germany
1994	“Oskar-Karl-Forster-Stipendium”, Ludwig-Maximilians-University, Munich, Germany

PROFESSIONAL EXPERIENCE:

Projects	Enhanced Resolution Imager and Spectrograph (ERIS; 2012 - present): Project scientist. Adaptive Optics Facility (AOF; 2011 - present): Project scientist. Near UV spectrograph CUBES (2011 - 2012): Instrument Scientist for Phase A study. 3D visualization tool (2010 - 2012): Project scientist for the development of a 3D visualization tool for ESO VLT instrumentation. HST WFC3 slitless spectroscopy support (2006 - 2010): ST-ECF lead on ground calibration, HST Servicing Mission Observatory Verification (SMOV), in-orbit calibration and user support in collaboration with STScI.
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3D data analysis and visualization (2008 - 2010): ESO internal investigation (in collaboration with external 3D experts) into the needs of 3D data analysis and visualization.

Hubble Legacy Archive (HLA) project (2006 - 2010): Member of team which carried out a semi-automatic data reduction of HST-NICMOS and ACS slitless spectroscopy data including the VO compliant publication of the spectra.

HST Advanced Camera for Surveys (ACS) slitless spectroscopy support (2005 - 2010): Quality control, calibration and user support for the ACS grism and prism modes (in collaboration with STScI-ACS group).

GOODS project (2002 - 2008): VLT-FORS2/VIMOS spectroscopy support: mask preparation, monitoring of observations, data-reduction and public release of data. Development of publicly available archive of spectroscopy in the GOODS Deep Field South using “Virtual Observatory” concepts.

FORS2-MXU pipeline study (2004 - 2005): Feasibility study for the development of a FORS2-MXU data-reduction pipeline on the basis of the HST-ACS grism data reduction software in collaboration with ESO-DMD.

VLT-SINFONI (2004/05): Member of SINFONI science verification.

VLT-VIMOS (2003): Member of VIMOS science verification.

James Webb Space Telescope (2002-2004): Development of calibration concept for the Near Infrared Spectrograph (NIRSpec) in collaboration with ESA and industrial consortia. First definition of operation concept in collaboration with ESA and STScI.

- Committee work**
- Member of the Scientific Personnel Committee (SPC) (April 2013 - present)
 - Board member of ESO Adaptive Optics Facility (AOF) FDR (April 2010)
 - Board member of ESO GALACSI (adaptive optics system for MUSE) Final Design Review (June 2009)
 - Chairman of ESO MUSE Instrument Science Team (2006 - present)
 - Chairman of ESO Visitor Selection Committee (2006 - 2011)
 - Chairman of the ST-ECF internal review team to establish the scientific priorities for ST-ECF HLA products (2006 - 2007)
 - Member of OPTICON “Enhancing Research” group (2005 - 2008)
 - Member of ESO Health and Safety committee (2003 - 2005)
 - Member of ESO Visitor Selection Committee (2002 - 2011)
 - Organization of informal science talks at ESO (2002 - 2006)
 - Administration of laptops for fellows and students at ESO (2001 - 2002)
- Conference work**
- Co-Chair of ESO workshop 3D2014: Gas and Stars in Galaxies II - A multi-wavelength 3D perspective, Garching, Germany (2014)
 - Member of SOC for ESO workshop ”Fornax, Virgo, Coma, et al. - Stellar systems in nearby high density environments, Garching, Germany (2011)
 - Member of SOC/LOC for ”Slitless spectroscopy workshop”, Baltimore, USA (2010)

Member of SOC/LOC for ESO workshop “Central Massive Objects”, Garching, Germany (2010)

Member of SOC for ”OPTICON IFU workshop”, Postdam, Germany (2008)

Co-Chair of ESO workshop Gas and Stars in galaxies – A multi-wavelength 3D perspective, Garching, Germany (2008)

Member of SOC for “Fine-Tuning Stellar Population Models”, Leiden, Netherlands (2006)

Member of LOC for “Stellar populations 2003”, Garching, Germany (2003)

Member of LOC for “ESO-CERN-ESA Symposium 2002 on Astronomy, Cosmology and Fundamental Physics”, Garching, Germany (2002)

Member of SOC for “JENAM 2001” (Symp. 5), Munich, Germany (2001)

Invited Seminars Heidelberg JAC, Germany (2011)

Gemini North, USA (2011)

NOAO, USA (2009)

University of Portsmouth, UK (2009)

University of Durham, UK, (2007)

Swinburne University of Technology, Australia (2006)

University of Oxford, UK (2005)

Astrophysical Institut Potsdam, Germany (2004)

University of Göttingen, Germany (2002)

UC Santa Cruz, USA (2000)

Carnegie Observatories, USA (2000)

Steward Observatory, USA (2000)

Harvard-Smithsonian CfA, USA (2000)

University of Nottingham, UK (2000)

University of Liverpool, UK (2000)

University of Birmingham, UK (1999)

Conference talks ”Slitless Spectroscopy Workshop”, Baltimore, USA (2010)

”HST Calibration Workshop 2010”, Baltimore, USA (2010)

”The 2010 STScI Calibration Workshop”, Baltimore, USA (2010)

”Science with the new HST after Servicing Mission 4”, Bologna, Italy (2008)

”A new Zeal for Old Galaxies”, Roturua, New Zealand (2007)

”Fine-Tuning Stellar Population Models”, Netherlands (2006)

”Science Perspectives for 3D Spectroscopy”, Germany (2005)

”The environment of Galaxies”, Greece (2004)

”Euro3D workshop”, UK (2003)

”Stellar populations 2003”, Germany (2003)

”Euro3D Kick off meeting”, Spain (2002)

”The Formation & Evolution of Giant Elliptical Galaxies”, Germany (2001)

”JENAM01”, Germany (2001)

”Victoria Computational Cosmology Conference”, Canada (2000)

”Dynamics of Galaxies”, Netherlands (1999)

”The Evolution of Galaxies on Cosmological Timescales”, Spain (1998)

”Galaxy Formation”, Germany (1997)

Frequent talks at SAURON and ATLAS3D team meetings (2000 - present)

Refereeing

Referee for Agence Nationale de la Recherche (ANR), France (2012)
Referee for the Estonian Science Foundation (2010)
Reviewer for Calar Alto Legacy Survey (PMAS/PPAK instrument, 2009)
Regular referee for papers in A&A, AJ, ApJ & MNRAS (1999 - present)
Referee for Netherlands Organisation for Scientific Research (2004)
Frequent refereeing for UK telescope time applications (1999 - 2002)

Teaching

Shared supervision with Dr. Pierre-Alain Duc of Ph.D student Emin Karabal. Paris CEA/SO (2013 - present).
Shared supervision with Martin Zwaan of Master student Anne Klitsch. ESO (2014 - present).
Supervision of IMPRS Ph.D student Carina Lagerholm. ESO (2010 - 2013).
Shared supervision with Dr. Martin Bureau of Ph.D student Michael Williams. ESO/University of Oxford (2009-2010). Currently postdoc at MPE, Garching, Germany.
Shared supervision with Prof. Alfonso Aragon-Salamanca of Ph.D student Yara Jaffe Ribbi. ESO/University of Nottingham (2008 - 2009). Currently at Universidad de Concepcion, Chile.
Shared supervision with Dr. David Silva of IMPRS Ph.D. student Mariya Lyubenova. ESO (2005 - 2008). Currently postdoc at Groningen, Netherlands.
PhD thesis examination of Fatma Reda (2007), Max Spolaor (2009) and Christina Blom (2013), Swinburne University, Australia.
Lecture on "Modern Observatories", NEON school Asiago (2007) ESO lead on the organisation of the EC (*Marie Curie Actions*) sponsored "NEON Archive Observing Summer Schools" at ESO (2004 - 2008)
Member of NEON Observing School steering committee (2004 - 2008)
Shared supervision with Prof. Roger Davies of Ph.D student Bettina Gerken. ESO/University of Oxford (2003 - 2008).
Supervision of summer students at ESO: Christina Baldwin (2014), Olivier DoCao (2009), Craig Harrison (2004), Michael Pracy (2004), Emilie Jourdeuil (2003)
Shared supervision with Prof. Roger Davies of Ph.D student Richard McDermid. University of Durham (1999 - 2002). Currently staff member at Macquarie University.
Tutor at 3rd NEON observing school, Asiago Observatory, Italy (Sep 2002)
Marking of undergraduate physics problems as part of their continuous assessment. University of Durham (1995 - 98)
Guest lecturer Post-Graduate course Durham (1998 - 2001)

Software

Expertise in general astronomical data reduction with IRAF, MIDAS & IDL.
Expertise in the design and usage of purpose built pipeline software for

integral-field-units (SAURON, FLAMES, VIMOS, SINFONI)
Proficient user of office applications such as Word, Excel and Power-Point
Experience with UNIX, LINUX, HTML
Programming skills in FORTRAN, IDL

Languages English (very good)
 German (native)

SCIENTIFIC ACTIVITIES:

Publications See separate list of publications – more than 120 refereed publications (>30 among the first three authors) in a variety of fields such as galaxy formation & evolution, galaxy dynamics, globular cluster systems, and stellar population model calibration.

Over 7300 citations on ADS; h-index = 48; 25 articles with 100 or more citations.

Observing In general broad observational experience in optical+IR spectroscopy and imaging (>40 nights observing at 1 - 8m telescopes). Awarded observing time as PI and Co-I on regular basis.

Recent successful proposals as PI include:

VLT-SINFONI/VIMOS (088.B-0244, 21 h awarded): "An early-type galaxy in the making: pinning down the central stellar structure of NGC 7252 - at last"

VLT-SINFONI (383.B-0625, 7.5 h awarded): "Calibrating NIR integrated stellar population models in the AGB phase transition"

VLT-VIMOS (078.B-0518, 076.B-0637 in total 47.3 h awarded): "The formation mechanism of E+A galaxies as a function of environment"

VLT-SINFONI (078.B-0205, 28.5 h awarded): "An integrated spectral library of LMC globular clusters in the Near-Infrared"

Recent successful proposals as Co-I include:

ALMA Cycle 1 (2012.1.00293.S): The molecular gas in post-starburst galaxies (PI: Zwaan)

Gemini-North GNIRS (GN-2011B-Q-63): "Searching for Carbon Star Signatures in Early-Type Galaxies" (PI: R. McDermid)

GBT (2009-04-019, 40 h awarded): "A search for HI in E+A galaxies" (PI: M. Zwaan)

VLT-SINFONI (0.85.B-0221, 28 h awarded): "Weighing the Massive Black Holes in the Nearby Universe: Orbital structure and the shape of the MBH"

– σ relation ” (PI: D. Krajnović)

VLT-FORS (085.B-0971, 3 nights awarded): “UNraveling generations of dwarf ellipticals, the cluster-domination galaxy population” (PI: T. Lisker)

VLT-XShooter (084.D-1061, 9 nights awarded): “Panchromatic High-Resolution Spectroscopy of Local Group Star Clusters” (PI: T. Puzia)

MEMBERSHIP OF PROFESSIONAL SOCIETIES:

2003-present	IAU
2000-present	Royal Astronomical Society, UK
1994-present	Deutsche Physikalische Gesellschaft, Germany

MEMBERSHIP OF INTERNATIONAL SCIENTIFIC COLLABORATIONS:

2005-present	ATLAS3D collaboration: Multi wavelength integral-field mapping of local early-type galaxies. PIs: Prof. Emsellem, Drs. Cappellari, Krajnović, McDermid
2000-present	SAURON collaboration: Integral-field mapping of local early-type galaxies. PIs: Profs. Bacon, de Zeeuw, and Davies.
2003-2009	GOODS collaboration

LIST OF REFEREES:

Prof. Roger L. Davies, University of Oxford, UK (rld@astro.ox.ac.uk)

Prof. P. Tim de Zeeuw, ESO, Germany (tdezeeuw@eso.org)

Dr. David Silva, NOAO, USA (dsilva@noao.edu)

Prof. Warrick Couch, Swinburne University, Australia (wcouch@swin.edu.au)

Prof. Reynier F. Peletier, Kapteyn Astronomical Institute, Netherlands (peletier@astro.rug.nl)