

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)
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EMPLOYMENT HISTORY:

- 2005-present** *ST-ECF Instrument Scientist:* ESO, Garching, Germany
Member of ESO faculty as *Associate Astronomer*
- 2002-2005** *ST-ECF Instrument Scientist:* ESO, Garching, Germany
Member of ESO faculty as *Assistant Astronomer*
- 2001-2002** *ESO Fellow:* ESO, Garching, Germany
Independent Research: Galaxy formation and evolution
- 1998-2001** *Senior Research Associate:* 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** *Research Assistant:* 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
The Star Formation History of Early-Type Galaxies in the Fornax Cluster
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:

- 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:

- Instrumentation** **Hubble Legacy Archive (HLA) project (2006 - present):** Pilot study for an automatic data reduction pipeline of HST-NICMOS slitless spectroscopy data (grism G141) including the VO compliant publication of the spectra.
- HST Wide Field Camera 3 slitless spectroscopy support (2006 - present):** Ground calibration and HST Servicing Mission Observatory Verification (SMOV) planning in collaboration with STScI.
- HST Advanced Camera for Surveys (ACS) slitless spectroscopy support (2005 - present):** Quality control, calibration and user support for the ACS grism and prism modes (in collaboration with STScI-ACS group).
- GOODS project (2002 - present):** 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 - 2005): Member of SINFONI science verification team

VLT-VIMOS (2003): Member of VIMOS commissioning and science verification team

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 Chairman of ESO MUSE Instrument Science Team (2006 - present)
Chairman of ESO Visitor Selection committee (2006 - present)
Chairman of the ST-ECF internal review team to establish the scientific priorities for ST-ECF HLA products (2006 - present)
Member of OPTICON “Enhancement Activities” group (2005 - present)
Member of ESO Visitor Selection Committee (2002 - present)
Member of ESO Health and Safety committee (2003 - 2005)
Organization of informal science talks at ESO (2002 - 2006)
Administration of laptops for fellows and students at ESO (2001 - 2002)

Conference work 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” (Mini Symposium 5), Munich, Germany (2001)

Invited Seminars 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 “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 GOODS team meetings (2000 - present)

Refereeing 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 Lead on the organisation of the EC (*Marie Curie Actions*) sponsored First and Second “NEON (Network of European Observatories in the North) archive observing summer schools” at ESO (2004, 2006)
Member of the NEON observing school steering committee (2004 - present)
Shared supervision of IMPRS Ph.D. student Mariya Lyubenova. ESO (2005 - present)
Shared supervision of Ph.D student Bettina Gerken. ESO/University of Oxford (2003 - present)
Supervision of summer students at ESO: Craig Harrison (2004), Michael Pracy (2004), Emilie Jourdeuil (2003)
Shared supervision of Ph.D student Richard McDermid. University of Durham (1999 - 2002). Currently post-doc at University of Leiden with Prof. P.T. de Zeeuw.
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 – 33 refereed publications (11 as first or second author) in a variety of fields such as galaxy formation & evolution, galaxy dynamics, globular cluster systems, and stellar population model calibration.

Over 1200 citations on ADS – Top cited article with 132 citations: Kuntschner 2000, MNRAS, 315, 184 – further 13 articles with each more than 30 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-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:

VLT-SINFONI (079.B-0402): “Measuring black hole masses and nuclear orbital distributions using SINFONI and LGS”

VLT-ISAAC (078.B-0619): “K-band spectroscopy of field elliptical galaxies: composite populations and abundance ratios”

VLT-FORS2 (P75.B-0187, P74.B-0592): “2-dimensional velocity fields of spiral galaxies”

VLT-FLAMES (P74.A-0770): “The nature of damped Ly α absorbers”

GALEX: “UV imaging of SAURON galaxies”

WHT-SAURON/OASIS: “Integral-field mapping of early-type galaxies” (More than 10 successful proposals in the last 6 years)

MEMBERSHIP OF PROFESSIONAL SOCIETIES:

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

MEMBERSHIP OF INTERNATIONAL SCIENTIFIC COLLABORATIONS:

2003-present	GOODS collaboration
2000-present	SAURON collaboration: Integral-field mapping of local early-type galaxies. PIs: Profs. Bacon, de Zeeuw, and Davies.