

## CV Ralph Neuhäuser



Birthday and place: 6 August 1966 in Soest/Westfalen, Germany  
Married to Dagmar L. Neuhäuser M.A., author/independent researcher

- 1972 - 1985           Elementary and High School in Soest, Germany
- 1985 - 1987           Studying physics at Ruhr-Universität Bochum, Germany
- 1986 - 1995           Scholarship award from Hanns-Seidel foundation
- 1987 - 1988           Studying physics at University of Sussex, England
- 6 - 8/1988           Summer Session of International Space University (MIT, Cambridge, USA)
- 1988 - 1992           Studying physics at Ruhr-Universität Bochum (finished July 1992)
- 1989 - 1992           Student fellow at Planetarium Bochum and University Bochum
- 1991 - 1992           Diploma thesis on *Radial migration of planetesimals*
- 7/1992                Diploma in Physics (Ruhr-Universität Bochum, Germany)
- 9/1992 - 2/1996      PhD in Astronomie (LMU Munich and MPE Garching)  
Topic: ROSAT Survey of the Taurus-Auriga T Association  
Supervisor: Prof. Morfill and Prof. Trümper  
Dissertation: summa cum laude, overall: magna cum laude
- 2/1996 - 1/1999      Post-Doc in DFG-priority program *Physics of star formation* (MPE Garching)
- 5/1997                Invited Review Article in *Science*
- 1997-2002            Head of sub-group of X-ray emission of young stars at MPE (with up to 15 people)
- 1998-2002            Teaching at LMU München in astronomy and physics
- 9/1998                Ludwig-Biermann-Award of (German) Astronomical Society (early career)
- 1999-2002            Fellow at MPE Garching
- 10/2000 - 4/2001    Guest Scientist at Institute for Astronomy, University of Hawai'i
- 1/2003                Habilitation in astronomy at LMU München  
Topic: Young nearby stars and sub-stellar companions
- since  
early 2003            Full Professor (Chair for Astrophysics) and Director of Astrophysical Institute  
and University Observatory of Friedrich-Schiller-Universität Jena, Germany  
(with full tenure)
- since  
mid 2024             Member of Thuringian Academy of Sciences  
(Akademie gemeinnütziger Wissenschaften zu Erfurt)

• **Teaching and Supervision of Thesis work:**

– Supervision of **Post-docs**:

The following former post-docs are on permanent positions in astrophysics now: Tom Hearty (NASA, US), Katharina Schreyer (U Jena, faculty), Markus Mugrauer (U Jena), Nicolas Grosso (Laboratoire d’Astrophysique de Marseille), Patrick Guillout (Observatoire astronomique de Strasbourg), Matilde Fernandez (U Granada, faculty), Gracjan Maciejewski (U Torun, Poland), Theo Pribulla, Martin Vanko (Obs. High Tatra, Slovakia), Kengo Tachihara (U Nagoya, Japan); Markus Hohle (former PhD student and then post-doc at AIU Jena) is on a lecturer position at UC Berkeley.

– Supervision of **PhD students**:

(career track)

Beate Stelzer	X-ray emission of young stars	faculty U Tübingen
Viki Joergens	Young brown dwarfs	(private company)
Nuria Huelamo	Young high-mass-ratio binaries	INTA Madrid
Brigitte König	Young X-ray binaries	high school teacher

(All the above co-supervised until 2002 at MPE Garching.)

Supervision of PhD students since 2003 at U Jena:

Matthias Ammler	Ursa Majoris group	MPI Göttingen
Chris Broeg	Planet formation theory	U Bern
Bettina Posselt	Isolated neutron stars	U Oxford
Markus Mugrauer	Multiplicity of planet host stars	AIU Jena staff
Akemi Tamanai	Laboratory astrophysics	MPK Heidelberg
Andreas Seifahrt	Infrared spectroscopy of GQ Lup b	U Chicago staff
Tobias Schmidt	Infrared spectroscopy of brown dwarfs	U Hamburg
Markus Hohle	X-ray emission of neutron star RXJ0720	lecturer UC Berkeley
Thomas Eisenbeiss	distances of isolated neutron stars	(private company)
Tristan Roell	High-precision infrared astrometry	(private company)
Mohammad Moualla	Eclipsing binaries	faculty U Lattacia
Stefanie Raetz	Planet transit timing	U Tübingen
Ludwig Treppl	X-ray emission of neutron stars	(federal administration)
Christian Ginski	Orbital motion of substellar companions	U Amsterdam
Nina Tetzlaff	Kinematics of neutron stars	(federal administration)
Simon Zeidler	Colors of star dust (lab)	U Tokyo
Martin Seeliger	Ground-based transit timing	(private company)
Janos Schmidt	QPOs of soft-gamma-ray repeaters	(private company)
Ronny Errmann	Search for young transit planets	U Heartfortshire
Manfred Kitzte	Super-flare star observations with Kepler	(private company)
Baha Dincel	Runaway stars in Supernova remnants	AIU Jena
Christian Adam	Companions to high-mass stars	U Valparaiso, Chile
Daniel Wagner	Historical aurora reports	(private company)
Oliver Lux	Late-type runaway stars in SN remnants	(private company)
Richard Bischoff	Follow-up of young transit planet candidates	(high school teacher)
Kai-Uwe Michel	LMXB and HMXB in nearby OB associations	(ongoing)
Günay Bulut	Nova remnant expansion	(ongoing)

– Supervision of **Diploma and Master thesis** work (since 2003 only):

Torsten Schöning, Andreas Seifahrt, Torsten Löhne, Christian Gräfe, Tobias Schmidt, Tristan Roell, Thomas Eisenbeiss, Markus Hohle, Stefanie Rätz, Simone Fielder, Mohammad Moualla, Alexandra Berndt (nee Költzsch), Christian Ginski, Nina Tetzlaff, Simon Zeidler, Ronny Errmann, Christian Adam, Georg Förster, Johannes Schönke, Ansgar Gaedke,

Sabine König, Helge Rehwald, Markus Gries, Michel Schneider, Stephan Krämer, Annegreth Reithe, Martin Seeliger, Janos Schmidt, Manfred Kitze, Anna Pannicke, Sabrina Schönfeld, Sven Buder, Kim Werner, Dario Fritzewski, Daniel Wagner, Susanne Richter, Jan Sende, Jonas Greif, Tamara Zehe, Therese Heyne, Michael Geymeier, Saskia Schlagenhauf, Florian Maurice Ebe, Luca Cortese (with INAF Padua), Sebastian Hüttel, Janine Bätz, Friedrich J. Edelmann (all finished).

- Recent supervision of **Bachelor thesis** work (since 2010 only):  
Christian Kuhn, Manfred Kitze, Emanuel Schmidt (2010), Greif Jonas, Sabrina Schönfeld, Yuan Wang (2012), Hartmut Gilbert (2012/13), Anika Dathe, Verena Wolf, Kim Werner, Sven Buder, Dario Fritzewski, Susanne Richter, Daniel Wagner (2013), Markus Drüke, Tamara Zehe, Aljoscha Ide, Franz Eysoldt (2014), Danny Hässner, Cora Preiss, Marie Braasch, Therese Heyne (2015), Marie Zeidler, David Wöckel, Michael Geymeier (2016), Daniel Oberhauser (2017), Vera Munz, Ludwig Opfermann, Fabienne Schiefeneder (2018), Wolfgang Stenglein, Saskia Schlagenhauf (2019), Sascha Hellmund, Florian Maurice Ebe (2021), Malina Jürgensen, Floris Scharmer, Eric Volkhardt, Phillip Pukallus (2022), Jonna Schickhoff (2023).
- (Co-)supervision of several final research theses by teacher students of astronomy didactics.
- Development of an exercise (2 times 4 hours) for astronomical practica (lab) for LMU Munich and U Jena on star formation (imaging photometry and spectroscopy). Supervision of several student groups each year since 1998.
- 15h of lectures on high energy astrophysics at U Porto (January 2002).
- Guest Lecture (2h) on Direct Imaging of Planets at Hebrew U Jerusalem (2011).
- Professor for Astrophysics at U Jena with 9h teaching per term:

**Lectures** given (2h per week, some several times):

Stellar astrophysics (hold every year, 2h or 4h/week), introduction to astronomy, high energy astrophysics, extra-solar planets, young stars, solar system, neutron stars, optical and infrared astronomy, massive stars, history of astronomy, Terra-Astronomy.

Seminars given (2h per week) on e.g. sub-stellar companions, brown dwarfs, star and planet formation, highlights of observational astrophysics, high dynamic range imaging and interferometry, multiplicity of stars, optical variability of stars, neutron stars, nucleosynthesis, planetary transits, solar activity, historical astronomy, literature & astronomy, runaway stars, binary stars, novae/supernovae – as well as institute seminars and physics and astrophysics colloquia.

- **Observing experience** (as Proposal PI and/or observer):

ESO La Silla (50cm photoelectric optical photometry, 0.9m-Dutch CCD imaging optical photometry, ESO-1.52m optical spectroscopy, ESO-MPG-2.2m CCD imaging optical photometry and mid-IR imaging photometry, 3.5m-NTT optical photometry and spectroscopy EMMI, optical imaging photometry SuSI, and near-IR photometry and spectroscopy SofI), 3.6m optical high-res. spectroscopy Harps.

ESO VLT Cerro Paranal: FORS 1 & 2 optical photometry and spectroscopy, ISAAC near-IR photometry and spectroscopy, UVES optical high-res. spectroscopy, NACO near-IR AO imaging, photometry and spectroscopy, Sinfoni near-IR AO IFU spectroscopy.

Mauna Kea: near-IR AO imaging and photometry Keck (NIRSPEC), Gemini (Hokupaa), Subaru (CIAO, HDS); near-IR imaging photometry UKIRT, NASA-IRTF, IfA-88inch.

Wendelstein (U Munich 80-cm telescope with CCD imaging optical photometry).

Calar Alto (3.5m, 2.2m und 1.23m for optical photometry, spectroscopy, and near-IR imaging and spectroscopy 1.23m-CCD imaging camera, CAFOS, FOCES, ALFA, AstraLux, O-Cass).

Hubble Space Telescope (WFPC2 optical imaging and photometry).

ROSAT (PSPC, HRI), BeppoSAX, Chandra, XMM-Newton, and VLA.

All instruments at the U Observatory Jena in Großschwabhausen (CCD imaging, lucky imaging, spectroscopy).

- **Colloquium talks:** Ruhr-Universität Bochum (2x), U Mass Amherst, State University of New York Stony Brook, Harvard Center for Astrophysics (opt., IR, and X-ray group), LMU München (2x), CEA Saclay Paris (2x), Rice University Houston, U Jena (pre-2003), MPIfR Bonn (2x), ARI Heidelberg, CalTech Pasadena, ETH Zürich (3x), PSI Zürich, ESO Santiago, U Erlangen/Bamberg (2x), AIP Potsdam (3x), UC Santa Cruz, UC Los Angeles, JPL Pasadena, IfA Honolulu (3x), U Göttingen, MPS Göttingen (2x), IfA U Hawaii Hilo, JAC Hilo/Hawaii, ESO Garching (joint Munich colloquium), U Stuttgart, U Tübingen, U Kiel, U Rostock (2x), Tel Aviv University (2x), TU Berlin (3x), U Torun (Poland) (2x), Technion Haifa (2x), Weizmann Institute Rehovot, Hebrew University Jerusalem (2x), Sabancı University Istanbul (2x), Ege University Izmir, MPI Potsdam-Golm, TU Istanbul, U Istanbul, Boğaziçi U Istanbul (2), METU Ankara, U Vienna (2x), INAF Napoli, U Ca'Foscari Venice, INAF Padua, TLS Tautenburg, FU Berlin (as well as many public talks and talks for high school teachers)
- **Invited talks at conferences:**
  - ‘Röntgenstrahlung from the Universe’ (highlight talk, Würzburg, 1995),
  - ‘2nd DENIS Euro-Conference’ (Tenerifa, 1996),
  - ‘Planetary formation in the binary environment’ (Stony Brook, 1999),
  - ‘International fall meeting of (German) Astronomical Society’ (talent shop talk, Tübingen, 1996),
  - ‘Cool Stars in Clusters and Associations: Magnetic Activity and Age Indicators’ (Palermo, 1997),
  - ‘International fall meeting of (German) Astronomical Society’ (early career Biermann award talk, Heidelberg, 1998),
  - ‘Optical and infrared spectroscopy of circumstellar matter’ (Tautenburg, 1999),
  - ‘From giant planets to cool stars’ (Flagstaff, 1999),
  - ‘The VLT view of star and planet formation’ (Garching, 2001),
  - ‘Planetenbildung: Das Sonnensystem und extrasolare Planeten’ (Berlin, 2002),
  - ‘Nuclei in the Cosmos’ (Heidelberg, 2010),
  - ‘Binaries and Planets’ (Tel Aviv 2012),
  - ‘Photometric Monitoring’ (Istanbul 2013),
  - ‘Supernovae, supernova remnants, and pulsar wind nebulae’ (Paris 2013),
  - ‘Second International Conference on Arabs and Muslims History of Science’ (Sharjah, VAE, 2014),
  - ‘6th International Conference on Space Climate’ (Levi, Finland, 2016),
  - Highlight talk at yearly meeting of Astronomical Society on ‘Terra-Astronomy’ (Bochum, 2016),
  - Introduction Review at Focus Meeting 5 ‘Understanding historical observations to study transient phenomena’ at the 2018 General Assembly of the International Astronomical Union (Vienna, Austria, 2018),
  - Talk on Carolingian astronomy during a lecture series on the history of astronomy at U Potsdam (fall 2020),
  - ‘2nd International Prof. Dr. Fuat Sezgin Symposium on the History of Science in Islam’ (Istanbul, 2021).
  - Talk on the history of Tycho Brahe’s SN 1572 and its brightness and color evolution during a Special Session on SN 1572 at the Annual Meeting of the European Astronomical Society (Valencia, Spain, 2022).
  - Talk at a conference on the history of astronomy (June 2023, University Ca’Foscari, Venice, Italy) about the historical color change of Betelgeuse.
  - Talk at the conference on Simon Marius and the Change in Worldview (June 2024, Ansbach) about observations and theories of SN 1604 by Marius and Galileo.
  - Talk at yearly main meeting of the Thuringian Academy of Sciences (Akademie gemeinnütziger Wissenschaften zu Erfurt), June 2025, on Terra-Astronomy.

- **Community service and membership:**

- Coordinator for splinter meetings on star and planet formation at yearly meetings of the Astronomische Gesellschaft (AG) from 1996 to 2005 (partly together with others), including at JENAM 2001 in Munich.
- Organisation of three German-Japanese workshops on X-ray astronomy 1997 to 2003 in Garching and Kyoto.
- Work (with many others) on German decadel review (DFG Denkschrift Astronomie).
- Member of International Astronomical Union, Astronomische Gesellschaft (AG), German physical society (DPG), Working Group for History of Astronomy at Astronomische Gesellschaft, etc.
- Referee for Nature, A&A, ApJ, AJ, PASP, PASJ, Solar Physics, AN, MNRAS.
- Chair of SOC of Joint European and National Astronomy Meeting Splinter Sessions on Extra-solar planets (2001).
- SOC Member, IAU Symposium on Brown Dwarfs in Hawaii (2002).
- Advisor to Observing Program Committee (OPC) at European Southern Observatory (ESO) 2002 and 2003.
- Member Science Advisory Team ESA/ESO interferometry project GENIE (2003 to 2005).
- Advisory Board Northrhine-Westphalia Academy of Science Commission for Stars and Galaxies (2004-2015).
- Member of evaluation committees of LAOG Grenoble (2006) and Kiepenheuer Institut Sonnenphysik (2007 and 2015).
- Organizer of international workshop on Transits (Transit Timing Variation and Young Exoplanet Transit Initiative) and Astronomical Interferometry (EU MC ToK), Nov 2010, Jena.
- SOC Member, International Conference “Observing techniques, instrumentation and science for metre-class telescopes”, Astronomical Institute of the Slovak Academy of Sciences and Safarik U Kosice, Slovak Rep. (Sept 2013)
- Member of editorial board of Astronomical Notes (Astronomische Nachrichten) since 2014
- SOC Member, International Conference “Star and Planet Formation”, U Jena (Sept 2017)
- Convenor for panel on astronomy at Deutscher Orientalisten Tag in Jena (Sept 2017)
- SOC Member IAU Symposium on *Long-term datasets for the understanding of solar and stellar magnetic cycles* in India (Feb 2018)
- SOC Chair for Focus Meeting no. 5 on *Understanding historical observations to study transient phenomena* at IAU GA in Vienna (Aug 2018): <http://www.astro.uni-jena.de/IAU>
- SOC Member, International Conference “Star and Planet Formation”, U Rostock (Feb 2019)
- One of 4 SOC members of Lorentz Center Workshop in Leiden, The Netherlands, on *Historical Supernovae, Novae and Other Transient Events* in October 2019.
- SOC Chair for a Lunch Session on *Betelgeuse as runaway star* at the European Astronomical Society Annual Meeting in July 2023 in Krawkow, Poland.
- Co-organizer (with Prof. Matteo Cosci) of a workshop on *Celestial novelties in the Early Modern Period* at U Ca’Foscari Venice, March 2025

- **Outreach:**

- Many interviews for newspaper, radio, and television
- Organisation of several Days of the Open Door and evenings of the Open Dome
- Public observations of Venus and Mercury transits as well as solar eclipses
- Many talks at high schools, to visiting classes, and other public talks

- **Languages:**

- German (mother tongue)
- English (fluent)
- Großes Latinum and Graecum
- Turkish, Arabic, Italian (basics)

- **Participation in academic administration:**

Director of Astrophysical Institute University Jena since early 2003, member of faculty council of Physics-Astronomy Faculty University Jena 2004-2013 and again since 2019, member of various commissions of the faculty council for faculty structure, PhD regulations, scholarship and prize selections, many PhD commissions (sometimes commission chair), several habilitation commissions, several professorship search commissions, member of the University advisory commission of ethics (since many years), and professorship search responsible for our physics and astronomy faculty (since 2019).

- **Large Soft Money Projects:**

In total, I have attracted about 4 million Euro soft money since 2003 from EU, DFG, ESO, Thuringian government, and DAAD. Here is a list of only the larger projects ( $\geq 100000$  Euro):

- PI of European Union (EU) Framework Program 6 (FP6) Marie Curie (MC) Transfer of Knowledge (ToK) project on Astronomical Interferometry at U Jena together with Institute of Applied Physics U Jena, Fraunhofer Institute for Optics Jena, Thüringer Landessternwarte Tautenburg, LAOG Grenoble, and INAF Napoli (with  $\sim 691,000$  Euro for 2006 to 2011).
- Co-PI on Phase-A study for European Southern Observatory (ESO) Very Large Telescope (VLT) Interferometer (VLTI) 2nd Generation Instrument named VLT Spectro Imager (VSI) with PI institute LAOG Grenoble (2005 to 2007).
- PI of grant from Thuringian Ministry for Science (TKM) for new CCD camera for 90-cm telescope in Großschwabhausen near Jena ( $\sim 191,000$  Euro for 2007-2009).
- Co-PI of project C7 on Astrophysical Populations in Sonderforschungsbereich Transregio (collaborative research center SFB TR 7) on Gravitational Wave Astronomy (Jena, Tübingen, Golm, Hannover, Garching) with project on neutron stars ( $\sim 240,000$  Euro for 2007 to 2010).
- Co-PI of projects C2, C7, and B8 on Neutron Stars in Sonderforschungsbereich Transregio (SFB TR 7) on Gravitational Wave Astronomy (Jena, Tübingen, Golm, Hannover, Garching) with projects on neutron stars population synthesis, quasi-periodic oscillations of neutron stars, and rotational phase-resolved spectroscopy of neutron stars ( $\sim 800,000$  Euro for 2011 to 2014).
- PI of instrumentation project for ESO (Mammut) on vibration control metrology for VLT mirrors ( $\sim 112,000$  Euro for 2009/2010).
- Co-PI of three projects in DFG Special Priority Program 1385 *The first 10 million years of the solar system* with Hauschildt, Redmer, Duschl ( $\sim 159,000$  Euro for 2010/2011).
- Co-PI of two projects in DFG Special Priority Program 1385 *The first 10 million years of the solar system*, with Redmer and Hauschildt ( $\sim 153,000$  Euro for 2012/2013).
- One of two Co-PIs of project *Search and identification of high-velocity stars by dynamical ejection and supernovae from multiple stars* in Armenia, for international cooperation, ca. 275,000 Euro for four years, for two PhD students and one post-doc at Bjurakan Observatory in Armenia (with Dr. Valeri Hambaryan, also AIU Jena).
- plus five DFG (German National Science Foundation) projects in normal procedure (Normalverfahren) since 2003, for three of which more than 100,000 Euro each:
  - ‘Supernovae in binaries, runaway stars, neutron star kicks, and kinematic ages’ (257,000 Euro), finished end of 2020.
  - ‘Observation and modelling of young transit planets’ (186,000 Euro), finishing end of 2021.
  - ‘Identification of runaway stars and neutron stars and dynamical interaction’ (411,000 Euro for three years), finished Jan 2023.
  - ‘Identification of recent nearby supernovae through high-mass X-ray binaries’ (241,000 Euro for three years), since Oct 2024.