

CURRICULUM VITAE

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PERSONAL DETAILS

Date of birth 28th October 1972

Nationality German

WORK EXPERIENCE

- since 05/11 **Reader in Meteorology** at the Institute for Climate and Atmospheric Science, University of Leeds, UK.
- since 06/09 **Lecturer in Dynamical Meteorology** at the Institute for Climate and Atmospheric Science, University of Leeds, UK.
- 09/05–05/09 **Leader of a German Science Foundation (DFG) funded Emmy Noether Independent Junior Research Group** at the Institute for Atmospheric Physics, University of Mainz, Germany.
Subject: *Tropical–extratropical interactions and their importance for intraseasonal variability and extreme events in the Tropics and extratropics*
- 06/05–08/05 **Researcher** at the Institute of Geophysics and Meteorology, University of Cologne, Germany
- 05/03–05/05 **German Science Foundation (DFG) Research Fellow** at the Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA, hosted by Prof. Jonathan E. Martin and Prof. emer. Stefan L. Hastenrath.
Subject: *Tropical–extratropical interactions in northern Africa: Physical mechanisms, climatological characteristics, and importance for the precipitation variability in the Tropics and subtropics*
- 07/99–04/03 **Research Assistant** at the Institute of Geophysics and Meteorology, University of Cologne, Germany (during my Ph.D. studies)

EDUCATION

- 05/08 **Habilitation in Meteorology, University of Mainz, Germany.**
Subject: *Tropical–extratropical interactions and their influence on clouds, precipitation, moisture transports and dust emissions*
Mentor: Prof. H. Wernli
- 07/99–02/03 **Ph.D. studies in Meteorology at the Institute of Geophysics and Meteorology, University of Cologne, Germany.**
Subject: *Precipitation variability in northwest Africa and the relation to*

- 05/99 *the large-scale atmospheric circulation and to the synoptic activity*
Supervisor: Prof. P. Speth, Mark: "summa cum laude"
Diploma in Meteorology, Institute of Geophysics and Meteorology University of Cologne, Germany.
Subject: *Cyclone activity and surface wind over the North Atlantic and Europe in a transient GHG scenario experiment.*
Supervisor: Prof. P. Speth, Mark: "sehr gut" (best mark)
- 1997–99 **Graduate studies** in Meteorology at the University of Cologne, Germany
- 1996–97 **Visiting Student** at the Department of Meteorology, University of Reading, UK
- 1993–95 **Undergraduate studies** in Meteorology at the University of Cologne, Germany

GRANTS, FELLOWSHIPS & AWARDS

- 2010–15 **Starting Grant**, European Research Council (1.36 M€)
- 2010–13 **Research Grant**, AXA Research Fund (450 k€)
- 2008–11 **Research Grant**, German Science Foundation (95 k€)
- 2005–10 **Emmy Noether Independent Junior Research Group**, German Science Foundation (600 k€)
- 2006–07 **Research Fond**, University of Mainz (22 k€)
- 2006 **Poster Award**, 27th Conference on Hurricanes and Tropical Meteorology, 24–28 April 2006, Monterey, USA, American Meteorological Society
- 2004 **Travel Grant**, World Meteorological Organization (500 \$)
- 2004 **Travel Grant**, African Studies Program, University of Wisconsin (300 \$)
- 2003–05 **Research Fellowship**, German Science Foundation (65 k€)

TEACHING

- Winter 10/11 Lecture series on **Dynamics of Weather Systems**, University of Leeds, UK
- Sept. 10 Field teaching summer school, Isle of Arran, Scotland, UK
- July 2010 Teaching in the Ewiem Nimdie Summer School, Kumasi, Ghana
- Winter 09/10 Lecture series on **Dynamics of Weather Systems**, University of Leeds, UK
- Sept. 09 Field teaching summer school, Isle of Arran, Scotland, UK
- Winter 08/09 Lecture series on **Numerical Methods, Data Assimilation, Predictability & Verification**, University of Mainz
- 2006–2009 Supervision of six student seminar presentations on *Density currents, The West African Monsoon, The dynamics of heat lows, PV Aspects of the Indian Monsoon, Moist absolute instability and Long-lived squall lines*, University of Mainz
- Summer 08 Lecture series on **Tropical–Extratropical Interactions**, University of Mainz
- Summer 07 Lecture series on **Tropical Meteorology** (among top ten evaluated optional lectures of the Department of Physics, Mathematics & Computer Sciences), University of Mainz

- Winter 06/07 Lecture series on **Tropical–Extratropical Interactions**, University of Mainz
- Winter 05/06 Lecture series on **Tropical Meteorology**, University of Mainz
- 2001/02 Supervision of an ERASMUS exchange student from Portugal, University of Cologne

SUPERVISION

Diploma:

- Esther Hohberger (Sept. 2008, now PhD at TU Darmstadt, Germany)
- Carmen Emmel geb. Deutscher (Oct. 2008, now PhD at University of Vancouver, Canada)
- Gregor Gläser (March 2009, now PhD at University of Mainz, Germany)
- Florian Berkes (since Nov. 2009, collaboration University of Mainz, Germany)

PhDs:

- Florian Meier (since Sept. 2005, now at Central Institute for Meteorology and Geodynamics (ZAMG), Vienna, Austria)
- Luise Fröhlich (since Feb. 2006, currently on maternity leave)
- Lars Wiegand (since Feb. 2008)
- Arwen Twitchett (supervision taken on from Doug Parker in November 2009)
- Alex Roberts (since Oct. 2010)
- Jennifer Owen (since Oct. 2010)
- Sophie Cowie (since Oct. 2010)
- Tim Baker (since Oct. 2010)
- Stephanie Fiedler (since May 2011)

Postdocs:

- Kerstin Schepanski (since Oct. 2009)
- Jenny Davis (since Oct. 2010)
- Tomasz Trzeciak (to start in Nov. 2010)

INVITED SCIENTIFIC PRESENTATIONS

- July 2011 Karlsruhe Institute of Technology, Germany: *Staubstürme – Eine große Herausforderung auf dem Weg zur Erdsystemmodellierung* (seminar)
- July 2011 Financial Services KTN and The Lighthill Risk Network, London, UK: *Uncertainties in Climate Projections of Severe European Windstorms* (European Windstorm Risk event)
- May 2011 University of Reading, UK: *Dust storms: A great challenge on the way to Earth system modelling* (seminar)
- Nov. 2010 ECMWF, Reading, UK: *Towards an improved representation of meteorological processes in models of mineral dust emission* (seminar)
- Nov. 2010 Imperial College, London, UK: *Towards an improved representation of meteorological processes in models of mineral dust emission* (seminar)
- Oct. 2010 UK Met Office, Exeter, UK: *Towards an improved representation of meteorological processes in models of mineral dust emission* (seminar)
- May 2010 Royal Meteorological Society, Leeds, UK: *Volcanic ash over Europe - When volcanology meets meteorology* (public lecture with Anja Schmidt)
- Nov. 2009 University of Leipzig, Germany: *Staubstürme – Beobachtungen, Modellierung und zukünftige Herausforderungen* (seminar)

- Nov. 2009 University of Mainz, Germany: *Staubstürme – Beobachtungen & Modellierung und zukünftige Herausforderungen* (seminar)
- Nov. 2009 University of Cologne, Germany: *Einfluss extratropischer synoptischer Störungen auf die Tropen* (advanced training seminar, German Meteorological Society)
- Dec. 2008 Laboratoire Interuniversitaire des Systèmes Atmosphériques, Universités Paris, France: *Atmospheric density currents* (seminar)
- Dec. 2008 Institute for Climate and Atmospheric Science, University of Leeds, UK: *Convective cold pools over the northwestern Sahara* (seminar)
- Dec. 2008 Institute for Atmospheric and Climate Science, ETH Zürich, Switzerland: *Atmospheric density currents* (seminar)
- Sept. 2008 Third International Dust Workshop, Leipzig, Germany: *Dust and hurricanes linkages* (workshop)
- June 2008 Institute of Meteorology and Geophysics, University of Innsbruck, Austria: *Ursachen und Auswirkungen extratropischer Wettersysteme in den niederen Breiten* (seminar)
- May 2008 PANDOWAE Workshop, Höfen, Germany: *Upper-level disturbances over the low-latitude North Atlantic: Dynamics, forecast quality and predictability* (workshop)
- Jan. 2008 Institut Pierre Simon Laplace, Paris, France: *Impact of extratropical upper-level disturbances on WAHL and SAL during the 8–12 June 2006 period* (workshop)
- Nov. 2007 MARUM Africa Workshop, University of Bremen, Germany: *Meteorological conditions for dust mobilisation in the Sahara* (workshop)
- Nov. 2007 Institute of Meteorology, University of Leipzig, Germany: *Extremniederschläge, Staubstürme und Wolkenbänder: Wie beeinflussen extratropische Wettersysteme die niederen Breiten?* (seminar)
- June 2007 Department of Meteorology, University of Reading, UK: *Meteorological conditions for dust mobilisation in the Sahara* (seminar)
- June 2007 Meteorological Institute, University of Munich, Germany: *Meteorologische Bedingungen für Staubmobilisierung in der Sahara* (colloquium)
- May 2007 Institute of Meteorology and Climate Research, University of Karlsruhe, Germany: *Meteorologische Bedingungen für Staubmobilisierung in der Sahara* (seminar)
- May 2007 Institute for Atmospheric and Climate Science, ETH Zürich, Switzerland: *Meteorological conditions for dust mobilization in the Sahara* (seminar)
- Dec. 2006 Second THORPEX International Science Symposium, Landshut, Germany: *AMMA and tropical–extratropical interactions* (short keynote)
- Sep. 2006 Institute of Tropospheric Research, Leipzig, Germany: *Mechanismen der Staubmobilisierung in der Sahara* (seminar)
- Nov. 2005 Institute for Atmospheric Physics, University of Mainz, Germany: *Tropisch-extratropische Wechselwirkungen und extreme Wettersituationen in Westafrika* (colloquium)
- May 2005 Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA: *Tropical–extratropical interactions and extreme weather situations in West Africa* (weekly colloquium)

- Mar. 2005 Department of Atmospheric & Oceanic Sciences, McGill University, Montréal, Canada: *Tropical-extratropical interactions and extreme weather situations in West Africa* (seminar)
- Feb. 2005 Atmospheric Science Department, University of Alabama in Huntsville, USA: *Tropical plumes and extreme precipitation in West Africa* (weekly seminar)
- Nov. 2004 Department of Earth and Atmospheric Sciences, State University of New York at Albany, USA: *Tropical plumes and extreme precipitation in West Africa* (weekly seminar)
- Nov. 2004 Department of Atmospheric Sciences, University of Washington, Seattle, USA: *Tropical plumes and extreme precipitation in West Africa: Moisture transport, precipitation generation, and large-scale dynamic and diabatic processes* (Dynamics Seminar ATM S 521)
- Oct. 2004 NOAA-CIRES Climate Diagnostics Center, Boulder, USA: *Tropical plumes and extreme precipitation in West Africa: Moisture transport, precipitation generation, and large-scale dynamic and diabatic processes* (weekly seminar)
- Feb. 2004 Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA: *Understanding rainfall variability as part of managing water scarcity in northwest Africa* (AOS 907 seminar)
- Jan. 2004 African Studies Program, University of Wisconsin–Madison, USA: *Understanding rainfall variability as part of managing water scarcity in northwest Africa* (weekly seminar)
- Jan. 2004 Institute for Atmospheric Physics, University of Mainz, Germany: *Physikalische Mechanismen von extremen Niederschlagsereignissen in Westafrika im Zusammenhang mit tropisch-extratropischen Wechselwirkungen* (seminar)
- Jan. 2004 Institute of Geophysics and Meteorology, University of Cologne, Germany: *Physikalische Mechanismen von extremen Niederschlagsereignissen in Westafrika im Zusammenhang mit tropisch-extratropischen Wechselwirkungen* (weekly colloquium)
- Dec. 2003 Department of Earth & Atmospheric Sciences, Purdue University, West Lafayette, USA: *Extreme precipitation events in West and northwest Africa in connection with tropical-extratropical interactions* (ATM seminar) and *Precipitation in subtropical northwestern Africa: Tropical vs. extratropical influences* (EAS colloquium)
- Oct. 2003 Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA: *Precipitation in northwest Africa: Tropical vs. extratropical mechanisms* (weekly colloquium)

PROFESSIONAL TRAINING

- June 10 *Effective Research Student Supervision for the Science, Engineering and Medically –Related Disciplines*, University of Leeds, Leeds, UK
- Feb. 10 *Effective Research Student Supervision: The Role of the Internal Examiner*, University of Leeds, Leeds, UK
- Nov. 09 *Virtual Learning Environment*, University of Leeds, Leeds, UK
- July 08 *Applying for European Research Council Starting Grants*, German Research Foundation, Bonn, Germany
- June 08 *Basic Methods of E-Learning*, Institute for Media Pedagogy, University of Mainz, Mainz, Germany
- March 07 *Project Management, Communication and Presentation*, German College for Administration Science (DHV), Speyer, Germany

- Oct. 06 *Career Paths in Science and Research*, German Research Foundation, Berlin, Germany
- Nov. 05 *Media Skills Training for Scientists*, German Research Foundation, Bonn, Germany
- Jan. 05 *New Chances for Young Scientists in Germany*, German Academic International Network, Chicago, USA
- Sept. 04 *Perspectives and Challenges of Higher Education and Science Policy*, German Research Foundation & German Academic Exchange Service, Boston, USA

MEMBERSHIPS

- since 2009 Member of the Royal Meteorological Society (RMetS)
- since 2006 Member of the European Geophysical Union (EGU)
- 2003–05 Member of the African Studies Program of the University of Wisconsin–Madison, USA
- 1999–2003 Member of the German interdisciplinary research project IMPETUS (An integrated approach to the efficient management of scarce water resources in West Africa)
- 1999–2002 Member of the European Geophysical Society (EGS)
- since 1999 Member of the German Meteorological Society (DMG)

MISCELLANEOUS ACTIVITIES

- May–June 11 Expert on the review panel for AXA Research Fund
- April–May 11 Expert on the review panel for Postdoc Research Projects for the Greek Ministry of Education, Lifelong Learning and Religious Affairs
- Jan.–March 11 Leader of a search committee for a new Lecturer in Meteorology
- since Oct. 10 Member of the steering committee of the *BBC Weather Test*
- since Sept. 10 Organizing committee for the Annual Meeting of the *Royal Meteorological Society*
- since Sept. 10 Associate editor for *Quarterly Journal of the Royal Meteorological Society*
- Sept. 10 Co-convener of the session *Tropical Meteorology and Tropical–Extratropical Interactions* and jury member for Poster Award at the German–Austrian–Swiss Meteorology Symposium 2010
- May 2010 Expert on the review panel Geophysics and Atmospheric Sciences of the Academy of Finland
- since Jan. 09 Associate editor for *Monthly Weather Review*
- Dec. 08 Jury member for the Ph.D. defence of Diana Bou Karam at the Institut Pierre Simon Laplace, Paris, France
- 2008–10 Associate editor for the AMMA Workpackage 2.1 Special Issue in *Quarterly Journal of the Royal Meteorological Society*
- May/June 08 Participation in the second international SAMUM field campaign on the Cape Verde Islands
- since April 08 Convener of the Interdivision Session *Aeolian dust: initiator, player, and recorder of environmental change* at the General Assembly of the European Geosciences Union

- Sept. 07 Co-convenor of the session *Tropical Meteorology* at the German-Austrian-Swiss Meteorology Symposium 2007
- Sept. 07 Laudation for Prof. emer. Stefan Hastenrath on the occasion of the Alfred-Wegener medal award celebration at the German-Austrian-Swiss Meteorology Symposium 2007
- May/Jun 06 Participation in the first international SAMUM field campaign in southern Morocco
- since 2005 Interviews and contributions for TV broadcasts (SWR Landesschau Rheinland-Pfalz, ARD Nachtjournal), newspapers (Mainzer Rheinzeitung) and magazines (GEO)
- since 2005 Chair of the Interest Group on „AMMA and aspects of tropical–extratropical interactions“ initiated by the THORPEX Working Group on Predictability and Dynamical Processes (WG PDP)
- since 2005 Reviewer of research proposals submitted to the National Science Foundation (USA), the National Oceanic & Atmospheric Administration (USA), the Israel Science Foundation (ISF) and the German Science Foundation (DFG)
- since 2003 Reviewer for *Science, Weather and Forecasting, Journal of Hydrometeorology, Journal of Climate, International Journal of Climatology, Climate of the Past, Meteorology and Atmospheric Physics, Climate Research, Geophysical Research Letters, Journal of Hydrology, Theoretical and Applied Climatology, Monthly Weather Review, Atmospheric Research, Journal of Geophysical Research, Climate Dynamics, Quarterly Journal of the Royal Meteorological Society, Atmospheric Science Letters, Scientific Research and Essays, Environmental Research Letters, The Open Atmospheric Science Journal, Natural Hazards and Earth System Science, Aeolian Research, Atmospheric Chemistry and Physics, Atmospheric Environment*
- 1997–2003 Student representative of the Institute of Geophysics and Meteorology, University of Cologne, Germany