

CURRICULUM VITAE

Prof Dr Peter Knippertz

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HIGHLIGHTS

- 20 years of research experience at five institutions in three countries
- Broad research portfolio in dynamical meteorology with a focus on the tropics
- 131 peer-reviewed journal publications (~4000 citations, h-index 37*)
- Experience as leader of large collaborative projects (EU FP7, DFG SFB)
- Prestigious fellowships and awards (e.g. ERC Starting Grant, Emmy Noether)
- Editorial roles for four international journals and one comprehensive book
- More than 50 invited presentations at conferences and institutional seminars
- Supervision of >20 PhD students and 11 Postdocs
- Reviewer of >100 papers and >40 research proposals
- 14 years of successful teaching and student supervision
- 5 years of experience in teaching coordination and curriculum design

WORK EXPERIENCE

since 2013	Professor of Meteorology , Institute of Meteorology and Climate Research, Karlsruhe Institute of Technology, Germany
2012–2013	Professor of Meteorology , School of Earth & Environment, University of Leeds, UK
2011–2012	Reader in Meteorology , School of Earth & Environment, University of Leeds, UK
2009–2011	Lecturer in Dynamical Meteorology , School of Earth & Environment, University of Leeds, UK
2005–2009	Leader of a German Research Foundation (DFG) funded Emmy Noether Independent Junior Research Group , Institute for Atmospheric Physics, University of Mainz, Germany
2005	Researcher , Institute of Geophysics and Meteorology, University of Cologne, Germany
2003–2005	German Research Foundation (DFG) Research Fellow , Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA, hosted by Prof Jonathan E. Martin and Prof emer. Stefan L. Hastenrath
1999–2003	Research Assistant , Institute of Geophysics and Meteorology, University of Cologne, Germany (during my PhD studies)

* ISI Web of Science as of 21 June 2019

EDUCATION

- May 2008 **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
- 1999–2003 **PhD studies in Meteorology, Institute of Geophysics and Meteorology, University of Cologne, Germany**
 Subject: *Precipitation variability in northwest Africa and the relation to the large-scale atmospheric circulation and to the synoptic activity*
 Supervisor: Prof P. Speth, Mark: “summa cum laude”
- May 1999 **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)
- 1997–1999 **Graduate studies in Meteorology, University of Cologne, Germany**
- 1996–1997 **Visiting Student, Department of Meteorology, University of Reading, UK**
- 1993–1995 **Undergraduate studies in Meteorology, University of Cologne, Germany**

MAIN GRANTS & FELLOWSHIPS

- 2015–2023 **Waves to Weather (W2W)**, German Research Foundation Collaborative Research Centre 165, speaker for Karlsruhe (~21M€ total funding)
- 2017–2020 **Moisture Transport Pathways and Isotopologues in Water Vapour (MOTIV)**, German Research Foundation, Co-I (493k€)
- 2015–2019 **Mittelfristige Klimaprognose (MiKlip)**, German Federal Ministry of Education and Research, Co-I (13 M€ total funding)
- 2013–2018 **Dynamics-Aerosol-Chemistry-Clouds Interactions in West Africa (DACCIWA)**, EU-FP7 consortium, coordinator (8.75M€ total funding)
- 2012–2016 **Improved Seasonal Prediction of the Onset of the West African Monsoon**, UK Natural Environment Research Council (NERC) Open CASE studentship, PI (70k£)
- 2010–2015 **Desert Storms – Towards an Improved Representation of Meteorological Processes in Models of Mineral Dust Emission**, European Research Council Starting Grant, PI (1.36M€)
- 2010–2014 **A Seamless Approach to Assessing Model Uncertainties in Climate Projections of Severe European Windstorms (SEAMSEW)**, AXA Research Fund, PI (450k€)
- 2008–2012 **Upper-Level Extratropical Disturbances over the Low-Latitude North Atlantic: Generation Mechanisms and Predictability**, German Research Foundation, PI (95k€)
- 2005–2010 **Tropical–Extratropical Interactions and their Importance for Intraseasonal Variability and Extreme Events in the Tropics and Extratropics**, German Research Foundation Emmy Noether Advanced Fellowship, PI (600k€)
- 2003–2005 **Tropical–Extratropical Interactions in Northern Africa: Physical Mechanisms, Climatological Characteristics, and Importance for**

the Precipitation Variability in the Tropics and Subtropics,
German Research Foundation Research Fellowship, PI (65k€)

POSTER AWARDS & TRAVEL GRANTS

- 2018 **Outstanding Poster Award**, 39th Conference on Hurricanes and Tropical Meteorology, Ponte Vedra, USA, American Meteorological Society, with A. Schlueter, P. Vogel, A. H. Fink and T. Gneiting
- 2013 **Outstanding Poster Award**, Annual Meeting of the European Meteorological Society, with J. Owen and T. Trzeciak
- 2006–2007 **SAMUM (SAharan Mineral dUst experiMENT) field campaign**, University of Mainz Research Fund (22k€)
- 2006 **Poster Award**, 27th Conference on Hurricanes and Tropical Meteorology, Monterey, USA, American Meteorological Society, with A. H. Fink
- 2004 **Travel Grant**, World Meteorological Organization (500\$)
- 2004 **Travel Grant**, African Studies Program, University of Wisconsin, USA (300\$)

SUPERVISION OF STUDENTS AND POSTDOCS

Diploma students:

- Esther Hohberger (Sept. 2008)
- Carmen Emmel née Deutscher (Oct. 2008)
- Gregor Gläser (March 2009)
- Florian Berkes (Sept. 2010)

MSc students:

- Adam Burwell (September 2011)
- Joshua Allen (September 2011)
- Ailsa Barrow (September 2012)
- Pila Bossmann (December 2015)
- Lisa Hannak (August 2016)
- Jasmin Hofgärtner (December 2016)
- Kathrin Leydecker (February 2017)
- Marcel Buchholz (February 2017)
- Michael Maier-Gerber (February 2017)
- Anna Neubauer (August 2018)
- Lea Eisenstein (December 2018)
- Florian Becker (March 2019)
- Tanja Sauter (April 2019)
- Tristan Semsch (since November 2018)

PhD students

- Florian Meier (2005–2010, thesis not submitted)
- Luise Fröhlich (2006–2011, including maternity leave)
- Lars Wiegand (2008–2011)
- Arwen Twitchett (2009–2012, supervision taken over from Doug Parker)
- Alex Roberts (2010–2014)
- Jennifer Pirret née Owen (2010–2014)
- Sophie Cowie (2010–2014)
- Tim Baker (2010–2015)
- Stephanie Fiedler (2011–2014)
- Rory Fitzpatrick (2012–2016)

- Marlon Maranan (2014–2019)
- Peter Vogel (2015–2019)
- Andreas Schlüter (2015–2019)
- Pila Bossmann (2015–2016, not completed)
- Enrico Di Muzio (2015–2019)
- Joseph Njeri (2015–2019)
- Titike Bahaga (2015–2019)
- Thomas Engel (2015–2016, not completed)
- Philipp Zschenderlein (since 2017)
- Michael Maier-Gerber (since 2017)
- Thomas Kociok (since 2017)
- Georgios Papavasileiou (since 2017)
- Christopher Diekmann (since 2017)
- Elzina Bala (since 2018)
- Jan Wandel (since 2019)
- Lea Eisenstein (since 2019)
- Eva-Maria Walz (since 2019)

Postdocs

- Kerstin Schepanski (2009–2013)
- Jenny Davis (2010–2011)
- Tomasz Trzeciak (2010–2014)
- Bernd Heinold (2011–2012)
- Carl Gilkeson (2013)
- Bradley Jemmet-Smith (2013–2015)
- Florian Pantillon (2013–2019)
- Stephanie Fiedler (2014–2015)
- Anke Kniffka (2014–2018)
- Gregor Pante né Gläser (since 2014)
- Roderick van der Linden (since 2018)
- Marlon Maranan (2019)

MAIN TEACHING COURSES

July 2019	Summer School, Kumasi, Ghana
since 2013	Lecture series on Theoretical Meteorology, Tropical Meteorology, Numerical Weather Prediction, Statistics in Meteorology ; seminar series on Climate Change , Karlsruhe Institute of Technology, Germany
2010–2011	Lecture series on Dynamics of Weather Systems , University of Leeds, UK
July 2010	Ewiem Nimdie Summer School, Kumasi, Ghana
2009–2010	Field teaching summer school, Isle of Arran, Scotland, UK
2008–2009	Lecture series on Numerical Methods, Data Assimilation, Predictability & Verification , University of Mainz
2006–2009	Supervision of student seminar presentations, University of Mainz
2006–2008	Lecture series on Tropical–Extratropical Interactions , University of Mainz
2005–2007	Lecture series on Tropical Meteorology , University of Mainz (among top ten evaluated optional lectures of the Department of Physics, Mathematics & Computer Sciences)
2001–2002	Supervision of an ERASMUS exchange student from Portugal, University of Cologne

INVITED SCIENTIFIC PRESENTATIONS

- June 2018 International Cooperative for Aerosol Prediction (ICAP) 10th working group meeting, Exeter, UK: *The role of moist convection for dust emission*
- April 2018 BACCHUS final project meeting, Zurich, Switzerland: *The DACCIWA Project: Dynamics-Aerosol-Chemistry-Cloud Interactions in West Africa*
- April 2018 European Geosciences Union General Assembly, Vienna, Austria: *The relationship between Warm Conveyor Belts, Tropical Moisture Exports and Atmospheric Rivers*
- Feb. 2017 IMK-IFU Seminar, Garmisch-Partenkirchen, Germany: *The Challenge to observe, model and understand the West African monsoon system*
- Jan. 2017 97th AMS Annual Meeting, Seattle, USA: *The challenge of modeling the meteorology of dust emission: Lessons learned from the Desert Storms project*
- May 2016 ETH Zurich, Switzerland: *The challenge of modeling the meteorology of dust emission: Lessons learned from the Desert Storms project*
- June 2015 DLR-IPA, Weßling, Germany: *Dust storms – The challenge of modelling the meteorology of dust emission using weather and climate models*
- Dec. 2014 Royal Meteorological Society, Reading, UK: *Dust Forecasting*
- Oct. 2014 Bernhard-Nocht Institute, Hamburg, Germany: *Wüstenstürme*
- July 2014 Leibniz-Institute for Tropospheric Research, Leipzig, Germany: *Dust storms – The challenge of modelling the meteorology of dust emission using weather and climate models*
- May 2014 German Meteorological Society, Offenbach, Germany: *Wüstenstürme – Über die Herausforderung die Meteorologie von Staubemission mit Wetter- und Klimamodellen zu erfassen*
- June 2013 University of Munich, Munich, Germany: *Vorhersagen europäischer Sturmsysteme von der Meso- bis zur Klimaskala*
- March 2013 AXA CATNAT Workshop, London, UK: *Can we trust climate models to realistically represent severe European windstorms?*
- May 2012 4th International Cooperative in Aerosol Prediction Workshop, Frascati, Italy: *Meteorological controls on dust emission and implications for modelling*
- April 2012 European Geosciences Union General Assembly, Vienna, Austria: *Diagnosing the influence of diabatic processes on the explosive deepening of extratropical cyclones over the North Atlantic Ocean*
- Nov. 2011 University of East Anglia, Norwich, UK: *Predicting European wind storms from days to decades*
- Nov. 2011 Karlsruhe Institute of Technology, Germany: *Sturmvorhersagen von der Meso- bis zur Klimaskala*
- July 2011 Karlsruhe Institute of Technology, Germany: *Staubstürme – Eine große Herausforderung auf dem Weg zur Erdsystemmodellierung*
- July 2011 Financial Services KTN and The Lighthill Risk Network, London, UK: *Uncertainties in Climate Projections of Severe European Windstorms*
- May 2011 University of Reading, UK: *Dust storms: A great challenge on the way to Earth system modelling*
- Nov. 2010 European Centre for Medium-Range Weather Forecasts, Reading, UK: *Towards an improved representation of meteorological processes in models of mineral dust emission*

- Nov. 2010 Imperial College, London, UK: *Towards an improved representation of meteorological processes in models of mineral dust emission*
- Oct. 2010 UK Met Office, Exeter, UK: *Towards an improved representation of meteorological processes in models of mineral dust emission*
- 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*
- Nov. 2009 University of Mainz, Germany: *Staubstürme – Beobachtungen & Modellierung und zukünftige Herausforderungen*
- 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*
- Dec. 2008 Institute for Climate and Atmospheric Science, University of Leeds, UK: *Convective cold pools over the northwestern Sahara*
- Dec. 2008 Institute for Atmospheric and Climate Science, ETH Zürich, Switzerland: *Atmospheric density currents*
- Sept. 2008 Third International Dust Workshop, Leipzig, Germany: *Dust and hurricanes linkages*
- June 2008 Institute of Meteorology and Geophysics, University of Innsbruck, Austria: *Ursachen und Auswirkungen extratropischer Wettersysteme in den niederen Breiten*
- May 2008 PANDOWAE Workshop, Höfen, Germany: *Upper-level disturbances over the low-latitude North Atlantic: Dynamics, forecast quality and predictability*
- 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*
- Nov. 2007 MARUM Africa Workshop, University of Bremen, Germany: *Meteorological conditions for dust mobilisation in the Sahara*
- Nov. 2007 Institute of Meteorology, University of Leipzig, Germany: *Extremniederschläge, Staubstürme und Wolkenbänder: Wie beeinflussen extratropische Wettersysteme die niederen Breiten?*
- June 2007 Department of Meteorology, University of Reading, UK: *Meteorological conditions for dust mobilisation in the Sahara*
- June 2007 Meteorological Institute, University of Munich, Germany: *Meteorologische Bedingungen für Staubmobilisierung in der Sahara*
- May 2007 Institute of Meteorology and Climate Research, University of Karlsruhe, Germany: *Meteorologische Bedingungen für Staubmobilisierung in der Sahara*
- May 2007 Institute for Atmospheric and Climate Science, ETH Zürich, Switzerland: *Meteorological conditions for dust mobilization in the Sahara*
- Dec. 2006 Second THORPEX International Science Symposium, Landshut, Germany: *AMMA and tropical–extratropical interactions*
- Sept. 2006 Institute of Tropospheric Research, Leipzig, Germany: *Mechanismen der Staubmobilisierung in der Sahara*

- Nov. 2005 Institute for Atmospheric Physics, University of Mainz, Germany: *Tropisch-extratropische Wechselwirkungen und extreme Wettersituationen in Westafrika*
- May 2005 Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA: *Tropical–extratropical interactions and extreme weather situations in West Africa*
- March 2005 Department of Atmospheric & Oceanic Sciences, McGill University, Montréal, Canada: *Tropical-extratropical interactions and extreme weather situations in West Africa*
- Feb. 2005 Atmospheric Science Department, University of Alabama in Huntsville, USA: *Tropical plumes and extreme precipitation in West Africa*
- Nov. 2004 Department of Earth and Atmospheric Sciences, State University of New York at Albany, USA: *Tropical plumes and extreme precipitation in West Africa*
- 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*
- 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*
- Feb. 2004 Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA: *Understanding rainfall variability as part of managing water scarcity in northwest Africa*
- Jan. 2004 African Studies Program, University of Wisconsin–Madison, USA: *Understanding rainfall variability as part of managing water scarcity in northwest Africa*
- Jan. 2004 Institute for Atmospheric Physics, University of Mainz, Germany: *Physikalische Mechanismen von extremen Niederschlagsereignissen in Westafrika im Zusammenhang mit tropisch-extratropischen Wechselwirkungen*
- Jan. 2004 Institute of Geophysics and Meteorology, University of Cologne, Germany: *Physikalische Mechanismen von extremen Niederschlagsereignissen in Westafrika im Zusammenhang mit tropisch-extratropischen Wechselwirkungen*
- 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 and Precipitation in subtropical northwestern Africa: Tropical vs. extratropical influences*
- Oct. 2003 Department of Atmospheric & Oceanic Sciences, University of Wisconsin–Madison, USA: *Precipitation in northwest Africa: Tropical vs. extratropical mechanisms*

MEMBERSHIPS IN LEARNED SOCIETIES

- since 2009 Royal Meteorological Society (RMetS), Fellow since 2019
- since 2006 European Geosciences Union (EGU)
- 1999–2002 European Geophysical Society (EGS)
- since 1999 German Meteorological Society (DMG)

EDITORIAL ROLES

- since 2019 Co-editor of *Weather and Climate Dynamics*
- since 2018 Invited guest editor for *Atmospheric Chemistry and Physics / Atmospheric Measurement Techniques* Special Issue "New observations and related modelling studies of the aerosol–cloud–climate system in the Southeast Atlantic and southern Africa regions"
- 2012–2014 Lead editor of Springer book *Mineral Dust – A Key Player in the Earth System* with J.-B. Stuut (ISBN 978-94-017-8977)
- since 2010 Associate editor for *Quarterly Journal of the Royal Meteorological Society*
- 2009–2011 Associate editor for *Monthly Weather Review*
- 2008–2010 Associate editor for the AMMA Workpackage 2.1 Special Issue in *Quarterly Journal of the Royal Meteorological Society*

ACADEMIC ROLES

- 2014–2019 Director of Student Education, Meteorology, Faculty of Physics, Karlsruhe Institute of Technology
- 2018 External PhD examiner for Winifred Atiah and Jeffrey Aryee, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana
- 2018 External PhD examiner for Ambrogio Volonté, University of Reading, UK
- 2013 External PhD examiner for Nick Earl, University of East Anglia, Norwich, UK
- 2011 Leader of a search committee for a new Lecturer in Meteorology, University of Leeds, UK
- 2008 Jury member for the PhD defence of Diana Bou Karam, Institut Pierre Simon Laplace, Paris, France
- 1997–2003 Student representative of the Institute of Geophysics and Meteorology, University of Cologne, Germany

COMMITTEES AND ADVISORY BOARDS

- since 2019 External advisor to University of Leeds Met Office Strategic (LUMOS) Research Group
- since 2018 Member of Steering Board, Center for Mathematics in Sciences, Engineering, and Economics (MathSEE), KIT, Karlsruhe, Germany
- since 2018 Member of Regional Steering Committee for North Africa - Middle East – Europe of the World Meteorological Organization (WMO) Sand and Dust Storm Warning and Advisory Assessment System (SDS-WAS)
- since 2017 Member of World Weather Research Programme (WWRP) HIWeather Steering Group (Processes & Predictability theme)
- since 2015 Member of Steering Board, Center for Climate and Environment, KIT, Karlsruhe, Germany
- 2013–2018 Member of the Advisory Board of the EU-funded "Impact of Biogenic versus Anthropogenic emissions on Clouds and Climate: towards a

- Holistic UnderStanding” (BACCHUS) project led by Ulrike Lohmann (ETH Zurich)
- 2011–2014 Member of the Advisory Board of the AXA Research Fund project “Regional Assessment of Climate impact on European WINDstorms” (RACEWIN) project led by David Stephenson (University of Exeter)
- 2010–2013 Member of the steering committee of the *BBC Weather Test*
- 2005–2010 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)

CONFERENCE AND WORKSHOP ORGANISATION

- 2017 Organizing committee, Conference on Predictability and Multi-Scale Prediction of High Impact Weather, Landshut, Germany
- 2012 Main organiser of a workshop on European windstorms at the University of Leeds, Leeds, UK
- 2012 Co-Organizer of Special Evening Session “75 Years of AEW Research: Historical Perspectives, Recent Advances, and Future Challenges” at 30th Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, Ponte Vedra Beach, FL, USA
- 2010–2011 Organizing committee for the Annual Meeting of the *Royal Meteorological Society*
- 2010 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
- since 2008 Convener of the interdivision session *Aeolian dust: initiator, player, and recorder of environmental change* at the General Assembly of the European Geosciences Union, Vienna, Austria
- 2007 Co-convener of the session *Tropical Meteorology* at the German-Austrian-Swiss Meteorology Symposium 2007
- 2007 Laudation for Prof emer. Stefan Hastenrath on the occasion of the Alfred-Wegener medal award celebration at the German-Austrian-Swiss Meteorology Symposium 2007

REVIEWER ROLES

- since 2003 Reviewer* of >100 papers for *Science*, *Nature Climate Change*, *Nature Communications*, *Monthly Weather Review*, *Journal of Climate*, *Journal of the Atmospheric Sciences*, *Journal of Geophysical Research: Atmospheres*, *Geophysical Research Letters*, *Environmental Research Letters*, *Quarterly Journal of the Royal Meteorological Society*, *Climate Dynamics*, *Atmospheric Research*, *Atmospheric Chemistry and Physics*, *Atmospheric Science Letters*, *Bulletin of the American Meteorological Society*, *Climate Research*, *Aeolian Research*, *International Journal of Climatology*, *Atmospheric Environment*, *Journal of Hydrometeorology*, *Tellus*, *Weather and Forecasting*, *EOS*, *Journal of Hydrology*, *Meteorology and Atmospheric Physics*, *Natural Hazards and Earth System Science*, *Scientific Research and Essays*, *Space Science*

* see <https://publons.com/researcher/1371734/peter-knippertz/peer-review/>

- Reviews, The Open Atmospheric Science Journal, Theoretical and Applied Climatology, Climate of the Past*
- since 2005 Reviewer of >40 research proposals for German Research Foundation (DFG), Federal Ministry of Education and Research (BMBF, Germany), Alexander von Humboldt Foundation (AvH, Germany), German Academic Exchange Service (DAAD), National Science Foundation (NSF, USA), National Oceanic & Atmospheric Administration (NOAA, USA), L'Agence Nationale de la Recherche (ANR, France), Natural Environment Research Council (NERC, UK), European Facility for Airborne Research (EUFAR), Dutch Research Council (NOW), Israel Science Foundation (ISF), German Israeli Foundation (GIF), Israeli Ministry of Science, Technology and Space, Chilean Research Foundation (CONICYT), ETH Zurich Postdoctoral Fellowship Program
- 2013 Review panel for the HALO (High Altitude and Long Range Research Aircraft) Programme, German Research Foundation
- 2011 Review panel for AXA Research Fund
- 2011 Review panel for Postdoc Research Projects for the Greek Ministry of Education, Lifelong Learning and Religious Affairs
- 2010 Review panel Geophysics and Atmospheric Sciences of the Academy of Finland

FIELD WORK

- 2016 International field campaign of *Dynamics-Aerosol-Chemistry-Clouds Interactions in West Africa (DACCIIWA)*, five West African countries
- 2011–2012 Aircraft campaign of the *Diabatic Influences on Mesoscale Structures in Extratropical Storms (DIAMET)* project, UK
- 2008 Second international *SAMUM (SAharan Mineral dUst experiMent)* field campaign, Cape Verde
- 2006 First international *SAMUM (SAharan Mineral dUst experiMent)* field campaign, Morocco
- 2000–2002 Set-up of a surface station network in southern Morocco as part of the *An Integrated Approach to the Efficient Management of Scarce Water Resources in West Africa (IMPETUS)* project

OUTREACH ACTIVITIES

- 2019 Public lecture on "Saharastaub, Feuer, Abgase: Luftverschmutzung in Afrika", Effektivvoll am KIT, Karlsruhe, Germany
- since 2018 Initiative "Wahrscheinlich Wetter" to foster public understanding of probabilistic forecasts
- 2018 Contribution to book by Christian Serrer and David Nelles "Kleine Gase – Große Wirkung: Der Klimawandel"
- 2017 Contribution to book by Stefan Klein "Das All und das Nichts"
- since 2005 Interviews and contributions for TV (e.g. SWR, ARD, BBC), radio (e.g. BBC, Radio Regenbogen), newspapers (e.g. Mainzer Rheinzeitung, Badische Neueste Nachrichten) and magazines (e.g. GEO)

PROFESSIONAL TRAINING

- 2012–2013 *Tomorrow's Leaders Programme*, University of Leeds, UK
- June 2012 *Strategies for Successful Change*, University of Leeds, UK
- June 2010 *Effective Research Student Supervision for the Science, Engineering and Medically –Related Disciplines*, University of Leeds, Leeds, UK
- Feb. 2010 *Effective Research Student Supervision: The Role of the Internal Examiner*, University of Leeds, Leeds, UK
- Nov. 2009 *Virtual Learning Environment*, University of Leeds, Leeds, UK
- July 2008 *Applying for European Research Council Starting Grants*, German Research Foundation, Bonn, Germany
- June 2008 *Basic Methods of E-Learning*, Institute for Media Pedagogy, University of Mainz, Mainz, Germany
- March 2007 *Project Management, Communication and Presentation*, German College for Administration Science (DHV), Speyer, Germany
- Oct. 2006 *Career Paths in Science and Research*, German Research Foundation, Berlin, Germany
- Nov. 2005 *Media Skills Training for Scientists*, German Research Foundation, Bonn, Germany
- Jan. 2005 *New Chances for Young Scientists in Germany*, German Academic International Network, Chicago, USA
- Sept. 2004 *Perspectives and Challenges of Higher Education and Science Policy*, German Research Foundation & German Academic Exchange Service, Boston, USA