CURRICULUM VITAE

PERSONAL DATA

Name:	Dr. Stefan Josef Kneifel
Date of Birth:	26th December, 1981
City of Birth:	Wolfratshausen, Germany
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UNIVERSITY EDUCATION

05/2008 – 11/2011	PhD (Dr. rer. nat.) in Meteorology at the University of Cologne, Germany, Subject: *Characterization of snowfall using ground-based passive and active remote sensors.*
10/2002 – 04/2008	Diploma (equiv. M.S. degree) in Meteorology from the Ludwig-Maximilians-University Munich, Germany, Subject: *Modelling and observation of horizontal water vapor inhomogeneities using microwave radiometry* (in german).

EMPLOYMENT RECORD

since 01/2017	Leader of the Emmy-Noether Young Researcher Group "Optimal combination of Polarimetric and Triple frequency radar techniques for Improving MIcrophysical process understanding of cold clouds" (OPTIMIce) at the University of Cologne
08/2015 – 12/2016	PostDoc at the Institute of Geophysics and Meteorology, University of Cologne within the HD(CP)² project (BMBF).
05/2011 – 07/2013	PostDoc at the Institute of Geophysics and Meteorology, University of Cologne within the Reanalysis project of the Hans–Ertel Centre for Weather Research, German Weather Service (DWD).
05/2008 – 04/2011	Scientific Assistant at the Institute of Geophysics and Meteorology, University of Cologne within the TOSCA project (DFG).

01/2007 – 03/2008	Student Research Assistant in the field of passive microwave radiometry within the SFB-TR32 (DFG) at the Institute of Meteorology, University of Bonn.
11/2004 – 01/2006	Student Research Assistant at the Institute of Meteorology, University of Munich within the DWD project: *HUBOLA – Comparison of humidity data from the ATOVS and SEVIRI systems with ground-based radiosondes, microwave radiometers and GPS measurements.*
09/2002 – 10/2002	Working student, Institute for Atmospheric Physics, German Airospace Center (DLR), Oberpfaffenhofen, Germany: *Development of an electric field mill for observing the atmospheric electric field of thunderstorms.*
06/2002 – 07/2002	Voluntary Internship, German Weather Service (DWD), Hohenpeißenberg Observatory, project: VERTICATOR.
06/2001 – 04/2002	Alternative civilian service, Bavarian Nature Conservation Association (Bund Naturschutz in Bayern e.V.)

INTERNATIONAL EXPERIENCE

09/2013 – 02/2015	PostDoc fellowship from the German Academic Exchange Service (DAAD), with Prof. Kollias, McGill University, Montreal, Canada. Subject: *Development of advanced multi- and high frequency cloud radar techniques for a better process understanding of clouds and precipitation microphysics.*
12/2010 – 01/2011	Stay at the Belgian Princess Elisabeth Antarctic station, Soer Rondane Mountains, East Antarctica, within the HYDRANT project, (BELSPO, Prof. van Lipzig).
09/2010 – 11/2010	Visiting scientist at the University of Wisconsin, Madison, with Prof. Bennartz. *Work on multi-frequency radar methods for remote sensing of snowfall*.
04/2006 – 09/2006	Scientific Assistant at the University of Bergen, Norway, with Prof. Reuder. *Development of sensors and a data acquisition system for the observation of wind, temperature and humidity using small unmanned airplanes.*

TEACHING EXPERIENCE AND OUTREACH ACTIVITIES

- *Full-term Lecturer at McGill University, Montreal, Canada*
  - Lecture series ATOC-309 "Weather Radars and Satellites" (winter term 2014)
- *Lecturer at Institute of Geophysics and Meteorology, University of Cologne*
  - Interdisciplinary team-taught Lecture Series (Ringvorlesung) “Climate Change: Clouds, Precipitation, and Climate” (WS 2019/20)

  - Single lectures in MSc program about Cloud Physics (WS 2015/16, 2017/18, 2018/19).
  - Single lectures and supervision of project work for MSc course Advanced Remote Sensing (SS 2016, SS 2018, SS 2019)
- *Teaching Assistant, Institute of Geophysics and Meteorology, University of Cologne*
  - Tutorial courses for Master students in Radiation, Clouds, Precipitation (WS 2011/12)
  - Supervision and design of new exercise "Atmospheric electric field measurements" as part of the field practical course "storm chasing" (SS 2018)
  - Supervision of laboratory courses for undergraduate Meteorology students (SS2009, SS2011)
  - Supervision of field practical courses for graduate Meteorology students (SS 2012)
- Outreach activities at University of Cologne
  - Video production within the ITaRS training network, topic: „How does a cloud form?" (Youtube: https://youtu.be/gcdeuluWWEQ), 2016.
  - Design of experiments related to ice clouds for visiting school classes

SUPERVISION OF MASTER AND PHD STUDENTS

- Main MSc supervisor of Leonie von Terzi, University of Cologne, 2019.
- Main PhD supervisor of José Dias Neto, Markus Karrer, and Leonie von Terzi (University of Cologne)
- Member of PhD committee
  - Member of the examination committee for the PhD of Kristof van Tricht, Catholic University of Leuven, Belgium, 2016.
  - Member of the PhD advisory committee within the Geoscience Graduate School at the University of Cologne for Nils Küchler and Rosa Gierens.

MEMBERSHIPS IN SCIENTIFIC SOCIETIES

- Deutsche Meteorologische Gesellschaft (DMG)
- Deutsche Physikalische Gesellschaft (DPG)

ACTIVITIES AS EDITOR AND REVIEWER

- Associate Editor for Atmospheric Measurement Techniques (since 2019)
- Reviewer for International Peer Reviewed Journals
  - Bulletin of the American Meteorological Society
  - Journal of Atmospheric and Oceanic Technology
  - Journal of Applied Meteorology and Climatology
  - Journal of Geophysical Research - Atmospheres
  - Geophysical Research Letters

  - Monthly Weather Review
  - Quarterly Journal of the Royal Meteorological Society
  - Journal of Quantitative Spectroscopy and Radiative Transfer
  - Atmospheric Chemistry and Physics
  - Atmospheric Measurement Techniques
  - The Cryosphere
  - Meteorologische Zeitschrift
- Reviewer for Research Organizations
  - U. K. Natural Environmental Research Council (NERC)
  - Swiss Science Foundation (SNF)

EXTERNAL FUNDING RECORD (PI / CO-I)

2021 - 2024	Transregional Collaborative Research Centre SFB TR 172 (DFG) "Arctic Amplification: Climate Relevant Atmospheric and Surface Processes and Feedback Mechanisms" $(AC)^3$, PI of sub-project E03 "Mixed-phase cloud processes"
2019 - 2022	Priority Programme SPP 2115 (DFG) "Fusion of Radar Polarimetry and Numerical Modelling towards an improved understanding of cloud and precipitation processes" (PROM), PI of project "Understanding ice microphysical processes by combining multi-frequency and spectral radar polarimetry and super-particle modelling" (IMPRINT)
2018 - 2020	Research Grant "Ice processes in Antarctica: Identification via multi-wavelength active and passive measurements and model evaluation", Atmospheric System Research (ASR), U.S. Department of Energy, in collaboration with University of Leicester, UK.
2017 - 2019	Tender Multi Frequency Radar Instrument Study for ESA, Co-I with University of Leicester, UK.
2017 - 2021	Young Researcher "Emmy-Noether" Grant (DFG) to establish own working group "Optimal combination of Polarimetric and Triple frequency radar techniques for Improving Microphysical process understanding of cold clouds" (OPTIMIce)

AWARDS AND PRICES

2020	Max-Delbrück Price for Early Career Researchers from the University of Cologne, Germany.
2016	Young Researcher "Emmy-Noether" Grant from the German Research Foundation to establish own working group (5 years)
2015	Return Fellowship (6 months) from the German Academic Exchange Service (DAAD)

2013	PostDoctoral Fellowship (18 months) from the German Academic Exchange Service (DAAD).
2012	Young Academic Award from the Geoverbund Aachen-Bonn-Köln-Jülich (ABC/J), Germany.
2008	Best Poster Award, *10th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment*, Florence, Italy.
2002	5th place at the National German Youth Research Competition "Jugend forscht", Subject: *Measurement of the quasi-static atmospheric electric field with a self-developed electric field mill.*