# **CURRICULUM VITAE**

## MICHAEL MAIER-GERBER

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Born 20<sup>th</sup> of May 1991, Malsch, Germany

Nationality German

**WORK EXPERIENCE** 

11/2008

11/2005

**EDUCATION** 



# 4/2018 - 5/2018 Research visits at leading meteorological institutes in the USA University of Colorado, University of Florida, State University of Albany and others Funded by the Early-Career-Scientist Grant of the Waves to Weather research project Since 7/2017 Research associate at the Karlsruhe Institute of Technology, PhD student • active contribution in writing full proposal (including PhD project) of the DFG "Waves to Weather" (W2W; SFB 165) C3 project developing statistical-dynamical forecast models for subseasonal tropical cyclone activity based on deep learning approaches teaching and supervising students 5/2017 - 7/2017 Research assistant, WG Atmospheric Dynamics, Karlsruhe, Germany Publication on a multiscale predictability case study for tropical transition of a North Atlantic Hurricane 11/2016 - 12/2016 Student assistant, WG Land Surfaces and Boundary Layer, Karlsruhe Institute of Technology, Germany 2/2015 - 7/2016 Student assistant, WG Land Surfaces and Boundary Layer, Karlsruhe Institute of Technology, Germany Software development for the analysis of dropsonde measurements (KITsonde) Content management for the website of the integrated atmospheric observation system "KITcube" 5/2014 - 8/2014 Research internship at NOAA's Hurricane Research Division, Miami, USA Research project on Hurricane Ingrid using a new data assimilation technique

9/2019	MICMoR Summer School 2019, KIT/IMK-IFU, Garmisch-Partenkirchen, Germany "Working with Environmental Data – From Explorative Data Analysis to Deep Learning"
3/2019 – 4/2019	fast.ai course v3 "Practical Deep Learning for Coders"

Participation in the airborne Hurricane field campaign in 2014

Internship at the German weather service (DWD), Offenbach, Germany

Internship at the Landesanstalt für Umweltschutz Baden-Württemberg (LfU;

9/2018 Machine Learning Workshop on the Schneefernerhaus, Zugspitze, Germany

3/2018 + 2/2019 Advanced personal training with Jochen Biganzoli (theater director)

"Die Kunst sich selbst zu präsentieren"

nowadays LUBW), Karlsruhe, Germany

Since 11/2015	Early Career Scientist member in the Transregional Collaborative Research Center "Waves to Weather" (W2W; SFB 165)
2014 - 2017	<ul> <li>Karlsruhe Institute of Technology (KIT), Germany</li> <li>MSc Meteorology, 1.0 (very good)</li> <li>Thesis: "Predictability of Tropical Transition in the North Atlantic Ocean"</li> </ul>
2010 - 2014	<ul> <li>Karlsruhe Institute of Technology (KIT), Germany</li> <li>BSc Meteorology, 1.7 (good)</li> <li>Thesis: "Transient vortex Rossby waves on an idealized tropical cyclone in vertical wind shear"</li> </ul>
2007 - 2010	Aloys Henhoefer higher secondary vocational school, Pfinztal, Germany Academic high school diploma, 1.2 (very good), majors: information technology and mathematics
2001 - 2007	Aloys Henhoefer secondary school, Pfinztal, Germany High school diploma, 1.1 (very good)

#### PEER-REVIEWED PUBLICATIONS

Di Muzio, E., M. Riemer, A. H. Fink, **M. Maier-Gerber**, 2019: Assessing the predictability of Medicanes in ECMWF ensemble forecasts using an object-based approach. *Quart. J. Roy. Meteor. Soc.*, **145**, 1202–1217, <a href="https://doi.org/10.1002/qj.3489">https://doi.org/10.1002/qj.3489</a>.

Maier-Gerber, M., M. Riemer, A. H. Fink, P. Knippertz, E. Di Muzio, R. McTaggart-Cowan, 2019: Tropical Transition of Hurricane Chris (2012) over the North Atlantic Ocean: A Multi-Scale Investigation of Predictability. *Mon. Wea. Rev.*, **147**, 951–970, <a href="https://doi.org/10.1175/MWR-D-18-0188.1">https://doi.org/10.1175/MWR-D-18-0188.1</a>.

**Maier-Gerber, M.**, F. Pantillon, E. Di Muzio, M. Riemer, A. H. Fink, P. Knippertz, 2017: Birth of the Biscane. *Weather*, **72**, 236–241, <a href="https://doi.org/10.1002/wea.2995">https://doi.org/10.1002/wea.2995</a>.

#### **VOLUNTARY WORK**

3/2012 - 4/2014 Private coaching for higher secondary school pupils at the "Lerntreff Karlsbad"

8/2009 Outreach youth work in different villages in Moldova with "Operation Mobilisation"

Since 2005 Volunteering at the local church (children and youth activities)

## **TECHNICAL SKILLS**

Programming Python, FORTRAN, NCL, C++, PHP, JavaScript, SQL, Bash and more Statistics MATLAB, R

Miscellaneous UNIX, LaTeX, HTML and more

#### **REFERENCES**

Prof. Dr. Peter Knippertz Leader of the working group 'Atmospheric Dynamics'

Institute of Meteorology and Climate Research (IMK) Wolfgang-Gaede-Str. 1, 76131 Karlsruhe, Germany

Phone: +49 721 608-46102 peter.knippertz@kit.edu PD Dr. habil. Michael Riemer Institute of Atmospheric Physics Johannes Gutenberg University Becherweg 21, 55128 Mainz, Germany

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M. Maier - Gerber Karlsbad, October 20<sup>nd</sup>, 2019