

## Curriculum Vitae

### Personal Data

Name: [Prof. Dr. Gerrit Lohmann](#)  
Year of Birth: 1965  
Place of Birth: Göttingen  
Nationality: German  
Marital Status: Married, 2 sons

### Academic education and professional career

**1984–1992:** Universities Physics and Mathematics at the Georg-August University of Göttingen and Philipps University Marburg, Germany  
**1988:** Pre-Diploma (similar to Bachelor) Physics & Mathematics, University Marburg  
**1989–1992:** Scholarship of the "Hoechst Foundation"  
**1990:** Diploma examinations in Physics, Philipps University of Marburg  
Scientific and Teaching Assistant, Statistical Physics and Mathematics  
**1992:** Diploma thesis "Stability of stochastic dynamical systems"  
**1992-1995:** Graduate Research Assistant at the Alfred Wegener Institute for Polar and Marine Research in Bremerhaven, Germany  
**1994:** Visiting Scientist at Earth Science Centre, University of Gothenburg, Sweden  
Scholarship of "Deutscher Akademischer Austauschdienst". Host: Prof. Chen  
**1995:** PhD Defence at the University of Bremen, Germany. Thesis:  
"Stability of the Thermohaline Circulation in analytical and numerical models".  
**1996–2000:** Post-doc at the Max Planck Institute for Meteorology in Hamburg, Germany.  
Department: Physics of the Oceans & Climate Dynamics (Prof. Hasselmann)  
**2000–2001:** Bremen University, Geosciences Department. Project leader (KIHZ)  
**2001–2003:** Frontiers of Science Symposia Humboldt Foundation and US National Academy of Sciences, 2001, 2002, 2003 Organizing Committee  
**2001–2002:** Hamburg University, Meteorology Dept. Lecturer, Junior Research Group  
**2002–2004:** Permanent position (tenure) at Bremen University, Centre for Marine Environmental Sciences (MARUM). Lecturer, Junior Research Group  
**2002–2006:** Spokesperson for the German climate research programme DEKLIM  
**Since 2004:** Professor for "Physics of the Climate System" at the University of Bremen and the Alfred Wegener Institute for Polar and Marine Research, Germany  
**2006–2009:** President of the EGU Division "Climate: Past, Present, Future"  
Member of EGU Programme Committee  
**2007–2018:** Excellence Cluster "The Ocean in the Earth System" at Uni Bremen  
**2007:** Guest Scientist at PAGES & University of Bern, Switzerland  
**2008–2016:** Initiator and Speaker of the [Earth System Science Research School ESSReS](#)  
**2008–2011:** Head of COSMOS Paleo Activity  
**2008–2011:** Speaker DFG - Research Unit "Understanding Cenozoic Climate Cooling"  
**2009:** Romanian Academy Award „Stefan Hepites“ with Norel Rimbu, Klaus Grosfeld, Klaus Fraedrich, Frank Lunkeit  
**2012–2023:** Science Advisory Board of 'KatRisk LLC'  
**2013–2020:** Topic Speaker at AWI (The Earth system from a polar perspective)  
**Since 2015:** PAGES group Climate Variability Across Scales: from centuries to millennia  
**2015–2027:** Steering Committee and Speaker of WG 1: Physical system, PalMod Project  
**2016:** Guest Professor at the First Institute of Oceanography, Qingdao, China.  
**2018, 2019:** Guest Scientist at the Institute of Meteorology and Climate Research (KIT), Atmospheric Environmental Research, Garmisch-Partenkirchen  
**2019–2026:** PI, Cluster of Excellence "The Ocean Floor – Earth's Uncharted Interface"  
**Since 2021:** Topic Speaker "Ocean and Cryosphere under climate change" in the Helmholtz Program "Changing Earth - Sustaining our Future"  
**Since 2021:** Elected Member for the Academia Europaea  
**2024–2030:** ERC synergy grant "[i2B - Into the Blue](#)"

<http://orcid.org/0000-0003-2089-733X>

<https://scholar.google.de/citations?user=5OTpDloAAAAJ>

URL for web site: <https://paleodyn.uni-bremen.de/gl/>

G. Lohmann conducts high-impact research in climate science and have published more than 320 peer-reviewed papers (more than 120 in the last 5 years), with an overall h-index of 74 (google scholar), and 55 for publications over the last 5 years with increasing recent trajectory (about 2100 citations/year after google scholar for 2023).

In the last years, G. Lohmann was in steering groups of several large national and international projects like PalMod, ESM, PACMEDY, PAGES-CVAS (international) covering topics of the climate evolution of the last glacial-interglacial cycle, interglacials, climate variability or model development.

### **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

[Advisor](#) of 36 PhD students, 45 Master students, 7 Bachelor students, and 30 Postdoctoral Research Assistants @ Universities Hamburg & Bremen, AWI

### **TEACHING ACTIVITIES**

Since 2004 Professor – Environmental Physics (Climate, Dynamics, Ocean, Carbon), Bremen University, Germany ([List of courses](#))

2013 – 2014 Master Program Environmental Sciences, Universität Hagen, Germany

Since 2002 Teaching PhD students at (inter-)national Graduate Research Schools

2002 – 2004 Lecturer – Meteorology, University of Hamburg

### **ORGANISATION OF SCIENTIFIC MEETINGS**

Since 1998, organizer/co-organizer of international conference sessions or specialized workshops, member of the scientific committees for international conferences, **e.g.**

German-American Frontiers of Science Symposia for 2000-2003 (Humboldt Foundation/US Academy of Science); 2001-2004: European Geophysical Society (EGS) as Secretary for Meteorology; 2006-2009: President for the Climate division and steering committee for the yearly conferences of the European Geoscience Union (EGU)

### **INSTITUTIONAL RESPONSIBILITIES**

2021 – 2024 Research Topic Speaker at Helmholtz (Ocean and Cryosphere)

2013 – 2020 Research Topic Speaker at AWI (The Earth system from a polar perspective)

2019 – 2026 [Excellence Cluster MARUM 'Ocean Floor'](#), University of Bremen

2007 – 2018 Excellence Cluster MARUM 'The Ocean in the Earth System', PI

2008 – 2016 Initiator and Speaker: Earth System Science Research School (ESSReS)

2006 – 2013 [Scientific Steering Board at the German Climate Computing Centre](#)

2003 – 2006 Spokesperson for the German climate research program DEKLIM

### **COMMISSIONS OF TRUST (selection)**

2015 – Editor Arktos, Journal with Nature Springer

2013 – Editor and Initiator of the Series: SpringerBriefs in Earth System Sciences

2012 – 2023 Science Advisory Board of 'KatRisk LLC', a catastrophe modeling company

2010 – 2024 [Editor for Earth System Dynamics](#), EGU, Copernicus

2004 – 2015 [Editor for Climate of the Past](#), EGU, Copernicus

2003 – Reviewer for Nature, Science, Nature comm., Nature Geo., Clim. Dyn., CP, ESD, JGR etc.; funding organizations like ERC (Europe), NSF (US), DFG (Germany), NERC (UK), NOW (Netherlands), Humboldt Foundation

## MEMBERSHIPS OF SCIENTIFIC SOCIETIES

American Geophysical Union (AGU), European Geosciences Union (EGU), Past Global Changes (PAGES), Academia Europaea

### Selected [publications](#) (out of 334 peer-reviewed publications, 4 books)

1. Hörhold, M., Münch, T., Weißbach S., Kipfstuhl S., Freitag J., Sasgen I., Lohmann G., Vinther B. and T. Laepple, 2023: Exceptional temperatures in central-north Greenland ice cores. *Nature*, 613, 503–507. doi:10.1038/s41586-022-05517-z
2. Jonkers, L., T. Laepple, M. C. Rillo, X. Shi, A. M. Dolman, G. Lohmann, A. Paul, A. Mix, and M. Kucera, 2023: Plankton biogeography shows strong meridional variation in ice age to modern ocean warming. *Nat. Geosci.* 16, 1114–1119, DOI: 10.1038/s41561-023-01328-7
3. Lohmann, G., G. Knorr, A. Hossain, C. Stepanek, 2022: Effects of CO<sub>2</sub> and Ocean Mixing on Miocene and Pliocene Temperature Gradients. *Paleoceanography and Paleoclimatology* 37, (2), e2020PA003953, doi:10.1029/2020PA003953
4. Lohmann, G., 2020: Temperatures from energy balance models: the effective heat capacity matters, *Earth Syst. Dynam.*, 11, 1195–1208, <https://doi.org/10.5194/esd-11-1195-2020>.
5. Lohmann, G., M. Butzin, N. Eissner, X. Shi, C. Stepanek, 2020: Abrupt climate and weather changes across timescales. *Paleoceanography and Paleoclimatology* 35 (9), e2019PA003782, DOI:10.1029/2019PA003782, Special Section AGU Grand Challenges in Earth and Space Sciences
6. Lohmann, G., 2018: ESD Ideas: The stochastic climate model shows that underestimated Holocene trends and variability represent two sides of the same coin. *Earth Syst. Dyn.* 9, doi:10.5194/esd-9-1-2018
7. Maier, E., X. Zhang, A. Abelmann, R. Gersonde, S. Mulitza, M. Werner, M. Méheust, J. Ren, B. Chaplignin, H. Meyer, R. Stein, R. Tiedemann, G. Lohmann, 2018: North Pacific freshwater events linked to glacial ocean circulation changes. *Nature* 559, 241–245.
8. Lohmann, G., 2017: Atmospheric bridge on orbital time scales. *Theoretical and Applied Climatology*, 128 (3), 709–718.
9. Stein, R., K. Fahl, M. Schreck, G. Knorr, F. Niessen, M. Forwick, C. Gebhardt, L. Jensen, M. Kaminski, A. Kopf, J. Matthiessen, W. Jokat, and G. Lohmann, 2016: Evidence for ice-free summers in the late Miocene central Arctic Ocean. *Nature comm.* 7, 11148.
10. Knorr, G., and Lohmann, G., 2014: A warming climate during the Antarctic ice sheet growth at the Middle Miocene transition, *Nature Geoscience* 7, 376–381.
11. Zhang, X., Lohmann, G., Knorr, G., and Purcell, C., 2014: Abrupt glacial climate shifts controlled by ice sheet changes. *Nature* 512, 290–294.
12. Lohmann, G., M. Pfeiffer, T. Laepple, G. Leduc, and J.-H. Kim, 2013: A model-data comparison of the Holocene global sea surface temperature evolution. *Clim. Past*, 9, 1807–1839.
13. Laepple, T., M. Werner, and G. Lohmann, 2011: Synchronicity of Antarctic temperatures and local solar insolation on orbital time-scales. *Nature*, 471, 91–94.
14. Dima, M., and Lohmann, G., 2007: A hemispheric mechanism for the Atlantic Multidecadal Oscillation. *J. Climate* 20 (11), 2706–2719.
15. Felis, T, Lohmann, G, Kuhnert, H, Lorenz, S, Scholz, D, Pätzold, J, Al-Rousan, S A, Al-Moghrabi, S M, 2004: Increased seasonality in Middle East temperatures during the last interglacial period. *Nature* 429, 164–168
16. Knorr, G., and G. Lohmann, 2003: Southern Ocean Origin for Resumption of Atlantic Thermohaline Circulation during Deglaciation. *Nature*, 424, 532–536.

Bremen, January 1, 2024