



# Strategic Cooperation with Universität Hamburg

---

## Strategic Collaboration between Helmholtz- Zentrum Geesthacht and Universität Hamburg

Prof. Detlef Stammer, Universität Hamburg

Director

Center for Earth System Research and Sustainability (CEN)

Speaker

Cluster of Excellence CliSAP

Excellence Strategy CliCCS

---

## Strategic Cooperation

---

## Core of Climate Research in Hamburg

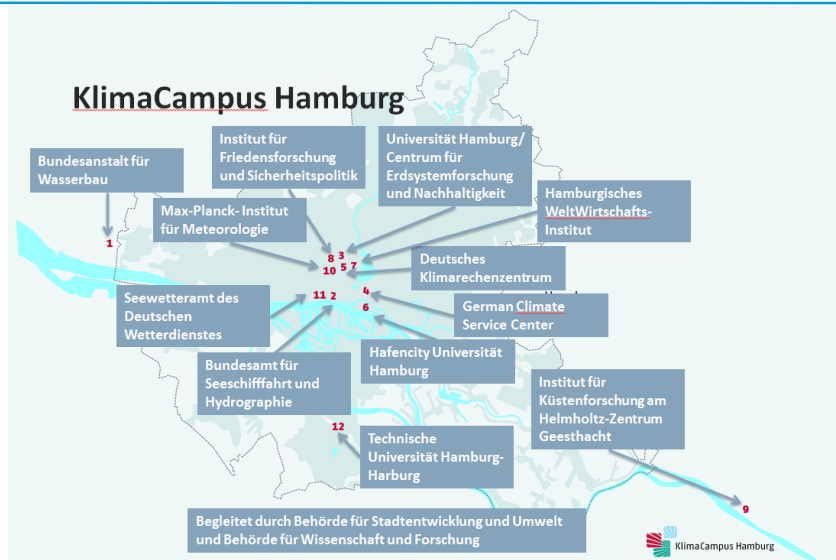
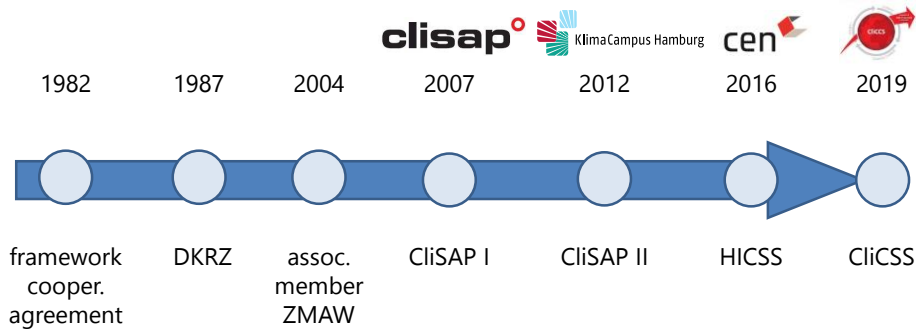
Full earth system  
science portfolio



German Climate  
Computing Centre

Institute for  
Coastal Research

## Milestones of the long-standing partnership



---

## Scientific Cooperation

---

## Cluster of Excellence "Integrated Climate System Analysis and Prediction"

**clisap** 

funded by the German Research Foundation (DFG)

- 2007—2012: €28.5 million
- 2012—2017: €24.5 million

Contributors: UHH, MPI-M, HZG, DKRZ

---

## CLiSAP - key questions

What are the key **feedbacks** and **dynamic processes** governing the global carbon, water and energy cycles relevant for climate variability and predictability?

What are the **impacts** of global climate change on sensitive regions, relevant climate sectors and phenomena?

What are the **interactions between climate and humans** in terms of global governance, security, communication, markets and cultural representation?

page 9

---

## The future of Hamburg's Climate Research:

Cluster of Excellence as part of the German Excellence Strategy:

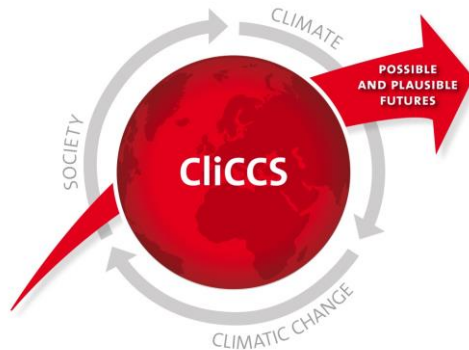
### **C**limate, **C**limatic **C**hange, and **S**ociety (CLiCCS)

- basic research on the dynamics of climate and social systems
- transdisciplinary research on human-environment-interactions
- significant contribution to conceptually underpin climate policy

Full proposal will be submitted by the Universität Hamburg jointly with external partners of the metropolitan region Hamburg

## Overarching CliCCS question:

Which climate futures  
are possible and  
which are plausible?



## Other current scientific collaborations



- CliSAP, CliCCS
- Collaborative Research Center Energy Transfers in Atmosphere and Ocean
- Priority Program SeaLevel



Bundesministerium  
für Bildung  
und Forschung

### Collaborative Research Projects

- *NOAH* (North Sea habitats)
- *EXTREMENESS* (extreme weather events)
- *PALMOD* (paleoclimate modeling)

HELMHOLTZ

- REKLIM (regional climate change)
- Excellence Network CliCCS
- PredMarES (predicting marine ecosystems)

---

## Academic Cooperation

---

## Academic partnership

SICSS/CEN School: International Graduate Program

Integration of climate system science disciplines:

- Meteorology
- Oceanography
- Geophysics
- Geosciences
- Geology
- Biogeochemistry
- Economics
- social sciences



**MSc program** (2 years)

Started in October 2009

**Doctoral program** (3 years)

Started in October 2008

## Academic partnership

Joint appointment processes respectively shared professorships:

Beate Ratter



UHH: Prof. geography  
HZG: Department Head

Corinna Schrum



UHH: Prof. oceanography  
HZG: Division Head

Kay Emeis



UHH: Prof. geology  
HZG: Division Head

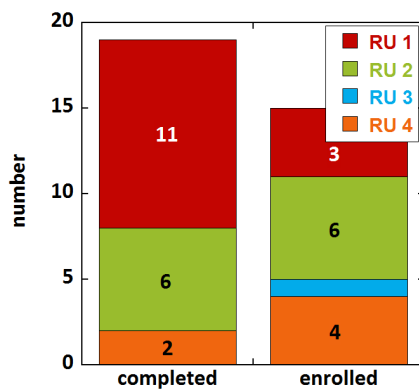
Hans von Storch (emeritus)



UHH: Prof. meteorology  
HZG: Division Head

Potential  
reappointment

## past/current HZG PhDs



## hands-on training on RV Ludwig Prandtl





## Joint Outreach

## Joint Outreach



Hamburg Science Night  
(every 2 years)



Climate Science Day



## Summary

Longstanding fruitful collaboration between Helmholtz-Zentrum Geesthacht and Universität Hamburg part of the success story for climate research in Hamburg:

Climate Research in Hamburg =

	
Universität Hamburg DER FORSCHUNG   DER LEHRE   DER BILDUNG	Max-Planck-Institut für Meteorologie
	
Helmholtz-Zentrum Geesthacht Zentrum für Material- und Küstenforschung	DKRZ DEUTSCHES KLIMARECHENZENTRUM

with Research, Academia and Outreach closely linked