

Curriculum Vitae

AGATHA M. DE BOER

Associate Professor in Physical Oceanography and Paleoceanography



Tel: +46 (0) 700 469 230

Email: agatha.deboer@geo.su.se

Homepage: people.geo.su.se/agatha/

Work Address: Department of Geological Science and the Bert Bolin Centre for Climate Research, Stockholm University, Stockholm 106 91, Sweden

Higher education

2011 Postgraduate Certificate in Higher Education Practice, University of East Anglia
2003 Ph.D. in Physical Oceanography, Florida State University, FL, United States
1997 M.Sc. coursework in Nuclear Reactor Physics, Potchefstroom University, South Africa
1994 B.Sc. Honors, Physics, University of Pretoria, South Africa
1993 B.Sc. (cum laude), Physics, Mathematics, University of the Orange Free State, South Africa

Professional experience

2011-present Associate Professor, Department of Geological Sciences and the Bolin Centre for Climate Research, Stockholm University, Sweden
2010 Guest Lecturer. Gothenburg University, Sweden.
2007-2011 Research Council UK fellow, University of East Anglia, UK
2006-2007 Senior Research Associate, Environmental Science Department, University of East Anglia,
2003-2006 Postdoctoral fellow in Program for Atmospheric and Oceanic Sciences, Princeton University, USA
1998-2003 Graduate Research Assistant, Florida State University, USA
1994-1997 Senior Physicist, Eskom, South Africa. Responsible for nuclear reactor physics and radiation protection studies.

Parental leave:

2015-2016 Worked four months at 0% full time and nine months at 20% full time.

Courses and workshops in education:

2019 Short course on the Nya online system for student applications.
2018 Workshop on the Ladok online system for course announcements.
2018 12 steps to succeed as a teacher
2018 What is academic teachership? Workshop for experienced university teachers in the Natural Science faculty
2018 Online short course on using the Athena educational platform
2012 Short course on using the Mondo educational platform
2010 Best Practice in Research Supervision, facilitated by Queens Mary College (London) Education and Staff Development Centre, UK.
2010 Advising Students, Centre for Staff Education and Development, UEA, UK.

Teaching

2019 Quantitative Methods in Geoscience 1st year level, course director;
Masters in Climate Science, director of studies;

2018 Paleoceanography and Paleoclimatology I, 2nd year level, teacher;
 Paleoclimatology and the Ocean System distance course, teacher.
 Quantitative Methods in Geoscience 1st year level, course director;
 Masters in Climate Science, director of studies;
 2017 Paleoceanography and Paleoclimatology I, 2nd year level, teacher;
 Paleoclimatology and the Ocean System distance course, teacher;
 Paleoceanography and Paleoclimatology I, 2nd year level, teacher;
 Paleoclimatology and the Ocean System distance course, teacher.
 2016 Paleoceanography and Paleoclimatology I, 2nd year level, teacher;
 Paleoclimatology and the Ocean System long distance course, teacher;
 2015 Paleoceanography and Paleoclimatology I, 2nd year level, teacher;
 Paleoclimatology and the Ocean System distance course, teacher.
 2014 Marine Geology II, 3rd year course, teacher;
 Paleoclimatology and the Ocean System distance course, teacher;
 Paleo-oceans and the Paleoclimate System, Masters level, teacher.
 2013 Marine Geology II, 3rd year level, teacher;
 Paleoceanography and Paleoclimatology, Masters level course, teacher.
 2012 Marine Geology II, 3rd year level, teacher;
 Paleoceanography and Paleoclimatology, Masters level course, teacher.
 2011 Atmosphere and Oceans, 1st year level, course director;
 Oceanography 2nd and 3rd year Field Course in Oban Scotland, teacher.
 2010 Atmosphere and Oceans, 1st year level, course director;
 First year environmental field course in Slapton, UK, teacher.
 2009 Oceanography 2nd and 3rd year field course in Oban Scotland, teacher.
 2008 Introductory Computing for Environmental Scientists, course director.
 2007 Basic Environmental Physics, 1st year level, teacher.

Postdoctoral research supervision

2015-2019 David Hutchinson, Stockholm University
 2016-2018 Part-time: Catherine Bradshaw, UK met office.

Ph.D. student supervision

2010-2014 Robert Graham, Stockholm University
Received award for best Ph.D. thesis in the Faculty of Science.
 2008-2012 Matthew Thomas, University of East Anglia (currently at GFDL/NOAA)

Masters project supervision

2011 Thomas Postans

Undergraduate project supervision

2011 Rickard Warren
 2010 Abigail Phillips, Thomas Stammer, James Wren, Jenna McGregor, and Abigail Mason

Field work

2009 JC32 South Atlantic section. Performed dissolved inorganic carbon and alkalinity measurements.
 2001 SFTREII research cruise to measure mixing in salt finger regions.

Awards and grants

2018	Docent travel stipend, 12 000 sek.
2016	Swedish Research Council project grant, 3 200 000 sek.
2013-2016	Various grants from Bolin Center for travel and publications, ~100 000 sek
2010	UEA Teaching fellowship (~50 000 sek)
2010	Gothenburg University Guest Lectureship (~120 000 sek)
2009	UK Royal Society networking grant (~47 000 sek)
2007	RCUK academic fellowship
2002	Outstanding Graduate Student Award, Dept. of Oceanography, FSU, USA
1990-1993	Full Study Scholarships from Eskom (Electricity Utility Company), South Africa
1990-1993	Academic Scholarships, Uni. of Orange Freestate and Uni. of Pretoria, South Africa

International leadership and service:

2019-present	Vice President of the International Association of the Physical Sciences of the Ocean (IAPSO). IAPSO is a subassociation of the International Union of Geodesy and Geophysics (IUGG) and the peak international scientific body for physical and chemical oceanography. For more information, see: http://iapso.iugg.org/ .
2015-2019	Member of executive committee of the International Association of the Physical Sciences of the Ocean (IAPSO).
2018	Co-organized an international workshop on the Miocene Climate for about 60 participants, Stockholm.
2019	Lead-convenor for symposium on Meridional Overturning Circulation in the Ocean at the IAPSO assembly, Montreal, Canada
2018	Co-organized an international workshop on the Middle Miocene Climate for about 30 participants, Stockholm.
2018-present	Convenor of a session on the Meridional Overturning Circulation at IAPSO assembly, Canada to be held July 2019.
2017	Co-organized an international workshop on the Eocene Oligocene Transition for about 30 participants, Stockholm.
2017	Co-convenor for symposium on Meridional Overturning Circulation in the Ocean at the IAPSO assembly, South Africa
2014	Organized an international workshop on the Southern Ocean Dynamics for about 30 participants, Stockholm.
2007-2013	Served on the leadership board of the international Earth Science Women's Network (ESWN). I lead the European branch of ESWN. In that capacity I organized annual ESWN receptions at EGU between 2008 and 2013 and an ESWN networking workshop at EGU 2013.
2011	External opponent, Ph.D. defense, Helene Langehaug, University of Bergen.
2010	Co-organized Royal Society UK-Australia Frontiers of Science meeting for international collaboration between promising young scientists.
2010	Public lecture for the Birkbeck Ecology Society, Imperial College, London.
Continuous	<u>Reviewed articles and books for:</u> Nature Geoscience, Nature Communications, Geophysical Research Letters, Journal of Physical Oceanography, Journal of Geophysical Research-Oceans, Atmosphere-Ocean, Reviews in Geophysics, Ocean Science, American Geophysical Union Solas book, Global Biochemical Cycles, Earth System Dynamics, Paleoceanography, Climate Dynamics, Philosophical Transactions of the Royal Society, Geology, Wiley publishers. <u>Reviewed for research councils:</u> US national science foundation, UK national environmental research council. <u>PhD external examiner:</u> Alba Legarda Lissari (defense 2019, University of Zaragoza, Spain). Helene Reinertsen Langehaug (defense 2011, University of Bergen, Norway).

National scientific leadership and service:

- 2016-present Serve on the Swedish National Committee for Geophysics (SNG) which is a subcommittee of the Swedish Royal Science Academy. For more information, please see:
<http://www.geofysiska.se/index.html>
- 2018 Elektor from Stockholm University for the Swedish Research Council.

University leadership and service:

- 2018-present Director of studies of Masters in Climate Science
- 2018-2019 Standby on Board of Department of Geological Sciences
- 2018-present Department representative in Section for Earth and Environmental Sciences
- 2013-present Founder and manager of the Bolin Centre Mentoring Program that provides cross-departmental mentorship annually to 20-30 junior scientists.
- 2013-2019 Co-leader of Bolin Centre for Climate Research, Research Area 1 "Atmosphere and Ocean Dynamics and Climate". We organized workshops and administrate an annual budget of 400 ksek between over 100 members. More information at: <https://bolin.su.se/index.php/ra1-ocean-atmosphere-dynamics-and-climate>
- 2016-2017 Serve on equality and equal opportunity group for Section for Earth and Environmental Sciences
- 2014-2016 Outreach: Helped out at annual Bolin Days for Children. I developed experiments in a water tank on a rotating table and used salt water, dye, and ice cubes to help children get an intuitive feel for oceanic and atmospheric phenomena.
- 2010-2011 Serve on Ph.D. Studentship election panel for department of Environmental Science, University of East Anglia, UK (previous position).
- Continuous Ph.D examining committee: Maxime Ballarotta (defense 2013), Raza Ranjha (defense 2013), Joakim Kjelsson (defense 2014), Per Pemberton (defense 2014).
Licentiate examining committee: Pedro Petro (defense 2016).
PhD defense chair: Daniele Reghellin (defense 2019).

Presentations and lectures

All oral presentation unless otherwise indicated. Invited talks are in italics.

- 2019 Presentation on Arctic flow at IAPSO assembly, Montreal, Canada
Presentation on Eocene-Oligocene Transition at IAPSO assembly, Montreal, Canada
- 2018 *Crafoord Price Symposium invited speaker, Stockholm, Sweden.*
Seminar at Oxford University, Oxford, UK
Seminar at British Antarctic Survey, Cambridge, UK
Presentation at workshop on Middle Miocene Climate, Stockholm, Sweden
Presentation at workshop on Arctic Dynamics, Stockholm, Sweden
- 2017 Presentation at IAPSO assembly, Cape Town, South Africa
Presentation at workshop on Southern Ocean and Climate, Stockholm, Sweden
Poster presentation at Paleoclimate Model Intercomparison Project meeting, Stockholm, Sweden
- 2016 *Presentation at workshop on Glacial Climate Puzzles, Stockholm, Sweden*
Poster presentation at International Conference on Paleoclimate, Utrecht, Netherlands
- 2015 *Presentation at workshop on Atlantic Meridional Overturning, Stockholm, Sweden*
Presentation at IAPSO assembly, Prague, Czech republic.
- 2014 *Presentation at workshop on Southern African Rainfall, Stockholm, Sweden.*
Presentation at workshop on Southern Ocean, Stockholm, Sweden.
- 2013 *Presentation at Gateways Conference, Jerusalem, Israel.*
Poster presentation at EGU, Vienna, Austria
Presentation at IAPSO assembly, Gothenburg, Sweden
Presentation at Bolin Days, Stockholm, Sweden.

- 2012 *Presentation at Lund University, Lund, Sweden*
Presentation at Ocean Sciences Meeting, Salt Lake City, USA
Seminar at L'OCEAN, Paris, France
Presentation at workshop on Walin Framework, Stockholm, Sweden
Poster presentation, Agulhas Conference, Cape Town, South Africa
- 2011 *Seminar at Cambridge University, Cambridge, UK,*
Seminar at Proudman Oceanographic Laboratory, Liverpool, UK,
Seminar at Southampton University, UK.
Seminar at University of East Anglia, Norwich, UK
- 2010 *Seminar at Gothenburg University, Gothenburg, Sweden;*
Seminar at Imperial College, London, UK;
Seminar at UK Met Office, Exeter;
Seminar at Stockholm University, Sweden.
Public lecture Birkbeck, London, UK
- 2009 *Presentation at UK-RAPID workshop. Reading, UK.*
Seminar at Hermanus Magnetic Observatory, Hermanus, South Africa
Presentation at IAPSO assembly, Montreal, Canada
Presentation at UK ocean modelling meeting, Oxford, UK
- 2008 *Presentation at UK Challenger meeting, Bangor, UK*
Presentation at EUA_Cefas day, Norwich, UK
Presentation at Ocean Sciences Meeting, Orlando, USA
Seminar at Yale University, Ocean Forum, USA
- 2007 *Seminar at Bern University, Switzerland*
Seminar at British Antarctic Survey, Cambridge, UK
Presentation at IAPSO assembly, Perugia, Italy
Seminar at Postdam Institute for Climate Research, Postdam, Germany
Seminar at Reading University, Reading, UK
- 2006 *Presentation at workshop on Nordic Seas, Bergen, Norway*
Seminar at University of East Anglia
Seminar at Southampton Oceanography Institute, UK
Presentation at Rapid meeting, Birmingham, UK
- 2005 *Seminar at Geophysical Fluid Dynamics Laboratory, Princeton, USA*
Presentation at EGU conference, Vienna, Austria
- 2004 *Presentation at Proper workshop, Amsterdam, Netherlands*
- 2003 *Presentation at Physical Oceanography Dissertation Symposium, Hawaii, USA*
Presentation at EGS conference, Nice, France

Invited talks and service declined due to travel related restrictions

- 2018 *Norwegian Research Council Panel*
- 2018 *Invited to PAGES C-SIDE workshop, Vancouver, Canada*
- 2017 *Moderating panel for UK National Environmental Research Council, UK*
- 2017 *Thesis defense committee for Ola Kalén, University of Gothenburg, Sweden*
- 2017 *Invited speaker at American Geophysical Union, San Francisco, USA*
- 2017 *Norwegian Research Council Panel*
- 2015 *Invited speaker at Leopoldina symposium, Germany*
- 2015 *Invited to workshop on Climate variability in Antarctica and Southern Ocean, La Jolla, USA*