

Curriculum Vitae – Johannes Hahn

Personal information

Name, first name: Hahn, Johannes
Nationality: German
Date of birth: 28-July-1982
Place of birth: Halle (Saale), Germany

Research interests

- dynamics, ventilation and oxygen budget of oxygen minimum zones in the open ocean
- large-scale and mesoscale circulation and its variability on seasonal to multi-decadal time scales
- water mass and oxygen distribution and its variability in response to circulation changes
- velocity, hydrography and oxygen observations in the open ocean from different platforms
- combination of these ocean observations with model simulations

Employment

06/2013 - present **Postdoctoral fellow** in the SFB754 at GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany, RD Physical Oceanography

10/2009 – 05/2013 **PhD student** in the SFB754 at GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany, RD Physical Oceanography

Education

05/2013 **Dr. rer. nat.** (magna cum laude) 'Oxygen Variability and Eddy-driven Meridional Oxygen Supply in the Tropical North East Atlantic Oxygen Minimum Zone'

10/2009 - 05/2013 **PhD student** in the SFB754 at GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany, RD Physical Oceanography

10/2003 - 09/2009 **Diploma** in Physics, Martin – Luther – University, Halle (Saale)

Peer reviewed publications

[4] Karstensen, J., Fiedler, B., Schütte, F., Brandt, P., Körtzinger, A., Fischer, G., Zantopp, R. J., **Hahn, J.**, Visbeck, M. and D. W. R. Wallace: *Open ocean dead-zone in the tropical North Atlantic Ocean*. Biogeosciences (BG), 12. DOI 10.5194/bg-12-2597-2015. (2015).

[3] Brandt, P., Bange, H. W., Banyte, D., Dengler, M., Didwischus, S. H., Fischer, T., Greatbatch, R. J., **Hahn, J.**, Kanzow, T., Karstensen, J., Körtzinger, A., Krahmann, G., Schmidtke, S., Stramma, L., Tanhua, T. and M. Visbeck: *On the role of circulation and mixing in the ventilation of oxygen minimum zones with a focus on the eastern tropical North Atlantic*. Biogeosciences (BG), 12. DOI 10.5194/bg-12-489-2015. (2015).

[2] **Hahn, J.**, P. Brandt, R. J. Greatbatch, G. Krahmann and A. Körtzinger: *Oxygen variance and meridional oxygen supply in the Tropical North East Atlantic oxygen minimum zone*. Climate Dynamics, 43. DOI 10.1007/s00382-014-2065-0. (2014).

[1] Brandt, P., R. J. Greatbatch, M. Claus, S.-H. Didwischus, V. Hormann, A. Funk, **J. Hahn**, G. Krahmann, J. Fischer and A. Körtzinger: *Ventilation of the equatorial Atlantic by the equatorial deep jets*. Journal of Geophysical Research – Oceans, 117. DOI 10.1029/2012JC008118. (2012).

Manuscripts in review

[1] **Hahn, J.**, P. Brandt, S. Schmidtke, and G. Krahmann: *Decadal oxygen change in the eastern tropical North Atlantic*. Ocean Science Discussions, in review. DOI 10.5194/os-2016-102. (2017).

Teaching, coordination and memberships

2016 – present	Member of the SFB 754 extended board and representative of the SFB 754 PostDocs
2014 – present	Supervision of students during various research cruises
2010 – present	Supervision of students within various seminars, literature works and internships
07/2016 - 11/2016	Assistance in coordination, planning and chairing of the SFB 754 one-week workshop for PostDocs in Götting, Germany
06/2016 – 09/2016	Supervision of a student research assistant for testing of self-written MATLAB toolboxes and analysis of oceanographic data
12/2014	Preparation, coordination and chairing of an afternoon seminar during the <i>Nansen Tutu Summer School on Ocean, Climate and Marine Ecosystem</i> in Capetown, South Africa
09/2014 – 11/2014	Planning, coordination and PI of the physical oceanography measurement program during R/V <i>Polarstern</i> cruise PS88.2

08/2013	Chief scientist during two one-day cruises with <i>R/V Skagerak</i> and <i>R/V Oscar von Sydow</i> during the SFB 754 summerschool in Kristineberg, Sweden
08/2013	Supervision of an external student in the framework of an internship
06/2013 – 08/2013	Assistance in coordination and planning of a two week SFB 754 summerschool in Kristineberg, Sweden
07/2011 – 08/2011	Proposal for and supervision of an external student within the <i>DAAD RISE</i> program
10/2010	Research assistant during practical field work on <i>R/V Alkor</i>

Fundraising

2014	Grant for funding of additional costs („Restmittel“ funding by the SFB754) for <i>R/V Polarstern</i> cruise PS88.2
2011	Grant for an external student within the <i>DAAD RISE</i> program
2010	Travel grant (by ISOS) for the summer school on <i>Ocean Observation with Remote Sensing Satellites</i>

Expeditions

2016	<i>R/V Meteor</i> cruise M130
2015	<i>R/V Meteor</i> cruise M116
2014	<i>R/V Polarstern</i> cruise PS88.2 (co-chief scientist and PI of the oceanographic research program)
2014	<i>R/V Meteor</i> cruise M106
2013	<i>R/V Skagerak</i> and <i>R/V Oscar von Sydow</i> (chief scientist during two one-day cruises in the framework of the SFB754 summer school)
2012	<i>R/V Maria S. Merian</i> cruise MSM22
2011	<i>R/V Maria S. Merian</i> cruise MSM18/2
2010	<i>R/V Alkor</i> (practical field work for students)
2009	<i>R/V Meteor</i> cruise M80/1
2004	<i>R/V Meteor</i> cruise M62/3

Computing and programming skills

- MATLAB (main usage), PYTHON, FORTRAN

- MATLAB based programming of toolboxes for internal use in research devision (e.g. comprehensive instrument processing for calibration of mooring time series data)
- Mathematica, webpage programming (html, php, java)
- Adobe environment, TEX, Office package
- Linux/Windows/Mac environment

Conference and seminar talks

[7] **Hahn, J.**, P. Brandt, S. Schmidtke, and G. Krahmann: Interplay of oxygen and hydrography *in the eastern tropical North Atlantic on decadal to multi-decadal time scales*. EGU General Assembly 2016, Vienna, Austria, 17/04/2016 - 22/04/2016.

[6] **Hahn, J.**, H. C. Bittig, G. Krahmann, J. Karstensen, P. Brandt, and A. Körtzinger: *In situ calibration procedure for Aanderaa optodes with a focus on glider oxygen measurements*. 6. EGO Meeting and Final Symposium of the COST Action ES0904, Kiel, Germany, 16/06/2014 - 17/06/2014.

[5] **Hahn, J.**, P. Brandt, R. J. Greatbatch, G. Krahmann, and A. Körtzinger: *O₂ Variance and Meridional Oxygen Supply in the Tropical North East Atlantic Oxygen Minimum Zone*. Ocean Sciences Meeting 2014, Honolulu, Hawaii, USA, 23/02/2014 - 28/02/2014.

[4] **Hahn, J.**, T. Fischer, P. Brandt, R. J. Greatbatch, A. Körtzinger, T. Tanhua, M. Visbeck, D. Banyte, M. Dengler, and G. Krahmann: *Oxygen Supply to the Tropical North East Atlantic Oxygen Minimum Zone*. Talk, SFB754 Colloquium, Kiel, Germany, 08/01/2014.

[3] Fischer, T., **J. Hahn**, P. Brandt, R. J. Greatbatch, A. Körtzinger, T. Tanhua, M. Visbeck, D. Banyte, M. Dengler, and G. Krahmann: *Oxygen Supply to the Tropical North East Atlantic Oxygen Minimum Zone*. **Invited Talk**, IOW Colloquium, Rostock, Germany, 18/11/2013.

[2] **Hahn, J.**, P. Brandt, R. J. Greatbatch, G. Krahmann, and A. Körtzinger: *Current and Oxygen Variability in the Tropical North East Atlantic*. Talk, TAV Meeting / PIRATA-18 Meeting, Venice, Italy, 22/10/2013 - 25/10/2013.

[1] **Hahn, J.**, P. Brandt, R. J. Greatbatch, G. Krahmann, and A. Körtzinger: *O₂ variance and meridional O₂ supply in the Tropical North East Atlantic*. Talk, TAV Meeting / PIRATA-17 Meeting, Kiel, Germany, 10/09/2012 - 15/09/2012.

Poster contributions

[4] **Hahn, J.**, P. Brandt, R. J. Greatbatch, G. Krahmann, and A. Körtzinger: *Meso- to submesoscale O₂ Variability in the oxygen minimum zone of the eastern tropical North Atlantic*. EGU General Assembly 2015, Vienna, Austria, 12/04/2015 - 17/04/2015.

[3] **Hahn, J.**, P. Brandt, R. J. Greatbatch, G. Krahmann, and A. Körtzinger: *O₂ Variability and*

Meridional Oxygen Supply in the Tropical North East Atlantic Oxygen Minimum Zone. EGU General Assembly 2013, Vienna, Austria, 07/04/2013 - 12/04/2013.

[2] **Hahn, J.**, P. Brandt, R. J. Greatbatch, A. Körtzinger, G. Krahmann, and A. Funk: *O₂ variance at intermediate depth in the central tropical Atlantic along 23°W.* EGU General Assembly 2012, Vienna, Austria, 22/04/2012 - 27/04/2012.

[1] **Hahn, J.**, P. Brandt, A. Körtzinger, G. Krahmann, J. Karstensen, M. Schlundt, A. Funk: *Mesoscale and Finescale Oxygen Variability at the Southern Edge of the Tropical North East Atlantic Ocean Oxygen Minimum Zone.* EUR-OCEANS Conference, Toulouse, France, 24/10/2011 - 26/10/2011.