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Biography

I am a physical oceanographer who uses ocean observations to investigate ocean dynamics and circulation in a changing climate. I have a particular interest in problems spanning scales (from micro- to large-scale) or spheres (biogeosphere, cryosphere, atmosphere), and in methods that leverage traditional observations with new platforms and satellite data.

Professional Experience	
Universität Hamburg, Professor	2022 - present
National Oceanography Centre, Visiting Fellow	2022 - present
National Oceanography Centre, Science Leader	2022
National Oceanography Centre, Principal Research Scientist	2018 - 2022
University of Southampton, Associate Professor	2016 - 2018
NASA Jet Propulsion Laboratory, Visiting scientist	2016
University of Southampton, Lecturer	2012 - 2016
National Oceanography Centre, Senior Research Fellow	2009 - 2012
Education	
Univ. of Washington, Ph.D. in Physical Oceanography (with Peter Rhines)	2009
University of Washington, M.Sc. in Applied Mathematics	2009
University of Washington, M.Sc. in Oceanography (with Eric Kunze)	2005
Harvard University A.B. with honors in Applied Math (with Ana Barros)	2002
Awards, Honours & Fellowships	
Ocean Observing Team Award, The Oceanography Society	2021
Nicholas P. Fofonoff award, American Meteorological Society	2021
EGU Outstanding Early Career Scientist award	2017
Steinbach Scholar at Woods Hole Oceanographic Institution (WHOI)	2016
Vice Chancellor's teaching award (UoS FNES, £1000 prize)	2015
Fellow of the Higher Education Academy (FHEA)	2015
Excellence in Teaching Award, category: Best Feedback (UoS FNES)	2014
Outstanding student paper award, AGU/ASLO Ocean Sciences	2008
WHOI Geophysical Fluid Dynamics Fellowship	summer 2004
UW Program on Climate Change Fellowship	summer 2002
Summer Undergraduate Research Fellow at Scripps Inst. of Oceanogr.	summer 2000
Certificate of Distinction for teaching (Harvard)	2000
Research Science Institute at the Massachusetts Institute of Technology	1997
Funding, competitive	
EU Horizon Europe, EPOC (PI). €8M.	2022 - 2027
with D. Desbruyeres, L. de Steur, V. Gunn, R. Ingvaldsen, J. Marotzke, R.	
Msadek, M. Rhein, J. Robson, D. Thornalley, W. von Appen. Explaining and	
Predicting the Ocean Conveyor.	
UKRI-funded (ERC) fellowship PycnoGen (co-l). €3.5M.	2022 - 2027
with A. C. Naveira Garabato (PI), Generation of the global ocean's internal	
pycnocline in the ice-covered Southern Ocean.	

NERC Highlight topic, DEFIANT (co-I). £5M. with J. Wilkinson (PI), A. Shepherd, D. Feltham, M. Meredith, A. Naveira Garabato. Understanding the Antarctic sea-ice decline in 2016, its representation in models and future predictions.	2021 - 2025
PLOCAN Eastern Boundary Current from Gliders (EBC-glider) (co-l). with A. Hernandez-Guerra (PI), Evaluate autonomous measurements for dynamic height and the contribution of local upwelling processes.	2023
NERC UK BGC Argo array (co-l). £1.5M. with B. A. King (PI), N. Briggs, N. P. Holliday, M. S. Donnelly, UK contribution to a global integrated biogeochemical autonomous ocean sensing network.	2021 - 2023
NERC Next generation multi-disciplinary array (BGC-RAPID) (co-l). £570k. with P. J. Brown (PI), S. Loucaides, S. Fowell, D. Rayner, Install lab-on-a-chip BGC sensors (pH, TAlk, nitrate, phosphate) and pCO2 and pH sensors on the RAPID eastern boundary array.	2021 - 2022
NERC Net Zero Oceanographic Capability (NZOC) (co-l). £250k. with L. Storey (PI), NERC scoping project to inform planning for the future low carbon oceanographic research capability.	2020
NERC Large Grant, DeCAdeS (co-l), NE/T012714/1. £3.4M. with A. Jenkins (PI), A. Naveira Garabato, T. Bracegirdle, A. Hogg, D. Jones, P. Holland, L. Boehme, A. G. Nurser, A. Phillips. Drivers of Oceanic Change in the Amundsen Sea.	2020 - 2025
Lloyd's Register autonomy demonstrator, ALADDIN (co-l). £165k. Assuring Long-term Autonomy through Detection and Diagnosis of Irregularities in Normal operation	2020
ERC Starting Grant Fellowship, TERIFIC (PI), 803140. €1,999k. Freshwater pathways and convection/restratification in the Labrador Sea.	2018 - 2023
NERC Standard grant, BLT Recipes (co-I), NE/S001433/1. £889k. with A. Naveira Garabato (PI), MJ. Messias. To assess the influence of bottom boundary layer turbulence on overturning.	2018 - 2023
NERC Standard grant, DynOPO (co-I), NE/K013181/1. £968k. with A. Naveira Garabato (PI), M. Meredith, P. Abrahamsen, K. Nicholls. Determine Orkney Passage outflow variability of Antarctic Bottom Water.	2015 - 2019
NERC Standard grant, MerMEED (PI), NE/N001745/1. £1,048k. with A. Naveira Garabato. Determine the levels and mechanisms of dissipation of mesoscale eddies at the western boundaries of the oceans.	2016 - 2019
NERC Technology grant, FreshWATERS (co-I), NE/P003176/1. £171k. with A. Sóbester (PI). Design air-launched technology for drifter deployment.	2016 - 2017
NERC Sensors on AUVs, GliSENEx (co-l), NE/J020184/1. £150k with A. Martin (PI), S. Painter. Use novel sensors on a Seaglider as part of the FASTNet project on UK shelf-edge exchange.	2013 - 2017
Leverhulme Trust Research Fellowship (PI), £14k A basinwide approach to the AMOC.	2016
Southampton Marine & Maritime Institute stimulus fund (co-l), £15k. with A. Sobester (PI), A. Naveira Garabato, A. Phillips. Proof-of-concept exercises using an remotely piloted vehicle to deploy an AUV.	2016
Huckabay Teaching Fellowship (UW) National Science Foundation Graduate Research Fellowship, 3 years National Defense Science & Engineering Graduate, Fellowship, 2 years	2008 2004 - 2007 2002 - 2004

Field Experience (responsibility in brackets)	
Qaqortoq, Greenland, (gliders), Small boat, 2 weeks Dec	Dec 2021
RRS Discovery (instrument allocations), RAPID moorings cruise, 8 weeks	Dec 2020
RRS James Cook (instrument allocations), RAPID moorings cruise, 4 weeks	Mar 2020
Qaqortoq, Greenland, (team lead), Small boat, 1 week Aug, 2 weeks Dec	Dec 2019
R/V Walton Smith, (training the PSO), MerMEED VMP/ADCP cruise, 2 weeks	Mar 2018
R/V Walton Smith (as PSO), MerMEED VMP/ADCP cruise, 2 weeks	Oct 2017
RRS James Clark Ross (Autosub), DynOPO process cruise, 7.5 weeks	Mar 2017
R/V Walton Smith (as PSO), MerMEED VMP/ADCP cruise, 1 week	Dec 2016
RRS James Clark Ross (CTD), DynOPO moorings & A23 section, 5 weeks	Mar 2015
RRS James Cook (underway/ADCP), RAPID moorings cruise, 6 weeks	Apr 2014
R/V Knorr (as UK PSO), RAPID moorings cruise, 3 weeks	Apr 2011
RRS Discovery (moorings), RAPID moorings cruise, 5 weeks	Dec 2010
R/V Wecoma (CTD/XCP), Internal waves over the Oregon slope, 2 weeks	Sep 2005
R/V Wecoma (microstructure/XCP), Hawaiian ridge waves & mixing, 3 weeks	Aug 2002
R/V Revelle (CTD/radiosonde), Juan de Fuca ridge movement, 2 weeks	Aug 2000
Teaching Experience (UHH = Hamburg, UoS = Southampton, UW = Washing	ngton)
Instructor, 63-705/6 Observational methods and remote sensing, UHH	2022
Coordinator & instructor, Proposal writing (5 sessions) for ECRs, NOC	2019
Coordinator & instructor, NEXUSS Statistics & Data Analysis, NOC	2018
Invited lecturer, ISNAO summer school, Bonne Bay, Canada	2017
Lead instructor, SOES3010/6005: Large Scale Ocean Processes, UoS	2014 - 2017
co-Instructor, SOES2025: Methods in Oceanography, UoS	2014 - 2017
co-Instructor, SOES3018: Falmouth fieldwork course, UoS	2017
co-Instructor, SOES6070: Advanced fieldwork course, UoS	2012 - 2014
Project coordinator, SOES3035: Research training, UoS	2013
Lead instructor, SOES3016: Oceanography from Space, UoS	2012, 2013
Lead instructor, OCN506: Communicating Science with Figures, UW	2008
Teaching assistant, OCN512: Intro to Fluid Dynamics, UW	2003
Course assistant, Math 1b: Calculus, Harvard University	2000

Mentorship and Supervision

Postdocs/Research Scientists: Louis Clement (2020–22), Darren Rayner (2020–22), Alej Sanchez-Franks (2019–21), Ben Moat (2019–22), Ilona Goszczko (2019–21), Carl Spingys (co-, 2017–20), D. Gwyn Evans (2016–19), Cristian Florindo-Lopez (2016)

PhD students: Markus Ritschel (co-), Maria-Jesus Rapanague (panel), Morag Forthingham (co-), Chris Auckland (co-), Manish Devana (committee), Delphine Lobelle (co-, PhD'19), Neela Morarji (co-, PhD'18), Freya Garry (PhD'17), Lena Schulze (PhD'16), Victoria Hemsley (co-, PhD'16), Louis Clement (PhD'14)

Supervised >**25** BSc and MSc dissertations since **2010**, including Jemima Rama[†] (MSci, 2016), Jo Ribeiro[†] (MSci, 2015), Lisa Holton* (BSc, 2013), Maren Richter (Kiel Univ., 2014) and Atul Kumar Yadev (IIT Bhubaneswar, 2013). *dissertation award, †top student award

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Service:	
CLIVAR AMOC Task Team, co-chair	2021 - present
CLIVAR Atlantic Regional Panel (ARP) co-chair	2021 - present
CLIVAR Atlantic Regional Panel (ARP) member	2019 - 2020
Royal Society Newton International Fellowships, Physical Sciences	2018 - 2022
NERC Peer Review College member	2016 - 2022
NEXUSS Centre for Doctoral Training (co-Director)	2017 - 2018

Women in Ocean and Earth Sciences at Southampton	2014 - 2016
UoS Employability representative	2012 - 2016
UW Student-faculty representative	2008
Organisation of Sessions/Conferences/Seminars:	
NZOC Workshop: 21st century marine scientist	2021
EGU General Assembly, Vienna: Ocean Circulation	2019
IUGG general assembly, Prague: MOC & Deep Currents	2015
AGU Fall Meeting, San Francisco: AMOC, climate variability and change	2014
Ocean Sciences, Honolulu: Frontiers in Oceanographic Data & Methods	2014
US AMOC/UK RAPID international meeting, Baltimore	2013
IAPSO meeting, Gothenburg: Thermohaline circulation and deep currents	2013
EGU General Assembly, Vienna: Ocean Circulation	2013
EGU General Assembly, Vienna: Ocean Circulation	2012
Ocean Sciences, Salt Lake City: Vertical Flow in the Ocean	2012
National Oceanography Centre: Physical Oceanography and Climate Seminar	2010 - 2011
UW: Student Physical Oceanography educational Retreat, Friday Harbor	2003, 2009
UW: Graduate Climate Change Conference, Pack Forest	2008

Outreach: Royal Institution Christmas Lectures, guest on episode 2 (2020), RRS Sir David Attenborough launch, talk & marine robotics stand (3 days, 2019), Soapbox Science & Art presenter, Bournemouth Arts Festival (2018), Talked to 300 school kids from Springhill Primary (2018), Kid's version of "heat wave" paper (2016), Discover Oceanography on "Oceanography from Space" to U3A (2015), STEMnet ambassador, Hampshire (2014), Ocean and Earth Day demos for Science & Engineering week, NOC (2012, 2013, 2019)

Journals refereed: Nature, Nature Geosci., Nature Comm., J. of Physical Oceanogr., J. of Atmos. and Oceanic Technol., Rev. in Geophys., Geophys. Res. Lett., J. of Geophys. Res.-Oceans, Deep Sea Res., Ocean Science, Progr. in Oceanogr., Remote Sensing of the Env., J. of Climate, Marine Technology Soc. Journal, Annals of Glaciology, Frontiers in Marine Sci.

Proposals refereed: NERC, NSF, Royal Society International Fellowships, Norwegian Research Council, National Defense Science & Engineering Graduate research fellowship, NASA Earth & Space Science Fellowships, German research vessels (GPF), EuroFleets vessels

Training and Certification

Autonomous Vehicles: Sailbuoy pilot training, Offshore Sensing AS, 5 days (6/2019), Seaglider pilot training, Kongsberg, 5 days (9/2017)

Safety & First aid: DRK First Aid, 8 hours (11/2022), IOSH Managing Safety in a Research Environment, 15 hrs (10/2018), First Aid at Work, 15 hrs (11/2019), ITC Certificate in Outdoor First Aid, SCQF Level 5, 16 hrs (2/2015)

Seagoing: Certificate in Proficiency in Designated Security Duties, 10 hrs (9/2020); STCW Personal Survival techniques certificate (updated 1/2017, 2010); ENG1 seafarer medical fitness certificate (1/2020, 3/2014); British Antarctic Survey medical (9/2014)

Diving: PADI Open Water (1996), Advanced diver No. 0009962148 (2000)

Teaching: "Flipped Learning", 4 hrs (2015); "Revitalising your Virtual Learning Environment", 2 hrs (2015); Postgraduate certificate in academic practice (PCAP) training, 24 hrs (2013); "Engaging Students in Research & Inquiry", 3 hrs (2013); "Effective Teaching and Learning in the Large Classroom Setting" by NAGT, 4 hrs (2012); "Supervising a PhD student," 3 hrs (2010)

Other: "Excelling at Academic Interviews," 7 hrs (2015); "Springboard: Women's development programme," 32 hrs (2015); "ThinkWrite: Quality Papers", 7 hrs (2013); "Building & Leading High Performing Teams", 7 hrs (2013); "Managing your Academic Career: for Women", 7 hrs (2013); "Climate Communications: Tools & Tips" at AGU fall mtg, 7 hrs (2012)

- [59] Berx, Volkov, Baehr, Baringer, Brandt, Burmeister, et al. "Climate-relevant ocean transport measurements in the Atlantic and Arctic Oceans". *Oceanography* 4 (2022). doi: 10.5670/oceanog.2021.supplement.02-04.
- [58] Evans, **Frajka-Williams**, and Naveira Garabato. "Dissipation of mesoscale eddies at a western boundary via a direct cascade". 1 (2022). doi: 10.1038/s41598-022-05002-7.
- [57] Jackson, Biastoch, Buckley, Desbruyeres, **Frajka-Williams**, Moat, et al. "The evolution of the North Atlantic meridional overturning circulation since 1980". *Nature Rev. Earth & Environ.* (2022). doi: 10.1038/s43017-022-00263-2.
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- [55] Danabasoglu, Castruccio, Small, Tomas, **Frajka-Williams**, and Lankhorst. "Revisiting AMOC Transport Estimates from Observations and Models". *Geophys. Res. Lett.* (2021). doi: 10.1029/2021GL093045.
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- [53] Spingys, Naveira Garabato, Legg, Polzin, Abrahamsen, Buckingham, et al. "Mixing and Transformation in a Deep Western Boundary Current: A Case Study". *J. Phys. Oceanogr.* (2021). doi: 10.1175/JP0-D-20-0132.1.
- [52] Evans, **Frajka-Williams**, Naveira Garabato, Polzin, and Forryan. "Mesoscale eddy dissipation by a "zoo" of submesoscale processes at a western boundary". *J. Geophys. Res.-Oceans* 11 (2020). doi: 10.1029/2020JC016246.
- [51] Fernandez-Castro, Evans, **Frajka-Williams**, Vic, and Naveira Garabato. "Breaking of internal waves and turbulent dissipation in an anticyclonic mode water eddy". *J. Phys. Oceanogr.* 7 (2020). doi: 10.1175/JP0-D-19-0168.1.
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- [47] **Frajka-Williams**, Ansorge, Baehr, Bryden, Chidichimo, Cunningham, et al. "OceanObs19: Atlantic meridional overturning circulation: Observed transports and variability". *Frontiers in Marine Science* (2019). doi: 10.3389/fmars.2019.00260.
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- [44] Meinen, Johns, Moat, Smith, Johns, Rayner, et al. "Structure and variability of the Antilles Current at 26.5°N". *J. Geophys. Res.-Oceans* (2019). doi: 10.1029/2018JC014836.

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- [40] Worthington*, **Frajka-Williams**, and McCarthy. "Estimating the Deep Overturning Transport Variability at 26°N Using Bottom Pressure Recorders". *J. Geophys. Res.-Oceans* (2019). doi: 10.1029/2018JC014221.
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- [22] Carton, Cunningham, **Frajka-Williams**, Kwon, Marshall, and Msadek. "The Atlantic overturning circulation: More evidence of variability and links to climate". *B. Am. Meteorol. Soc.* (2014). doi: 10.1175/BAMS-D-13-00234.1.
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- [17] **Frajka-Williams**. "Sustaining observations of an unsteady ocean circulation". *Philos. T. R. Soc. A* (2014). doi: 10.1098/rsta.2013.0335.
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- [12] **Frajka-Williams**, Johns, Meinen, Beal, and Cunningham. "Eddy impacts on the Florida Current". *Geophys. Res. Lett.* (2013). doi: 10.1002/grl.50115.
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- [5] **Frajka-Williams**, Eriksen, Rhines, and Harcourt. "Determining vertical water velocities from Seaglider". *J. Atmos. Ocean. Tech.* 12 (2011). doi: 10.1175/2011JTECH0830.1.
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- [1] Barros, Kim, **Williams**, and Nesbitt. "Probing Orographic Controls in the Himalayas During the Monsoon Using Satellite Imagery". *Nat. Hazard Earth Sys.* (2004). doi: 10.5194/nhess-4-29-2004.

Book chapters & non-refereed Publications

- [18] **Frajka-Williams**, Brearley, Nash, and Whalen. "New technological frontiers in ocean mixing". *Ocean Mixing: Drivers, Mechanisms and Impacts*. Elsevier, 2022. doi: 10.1016/B978-0-12-821512-8.00021-9.
- [17] deYoung, **Frajka-Williams**, von Oppeln-Bronikowski, and Woodward. "Technicalities: Exploring the Labrador Sea with autonomous vehicles". *The Journal of Ocean Technology* 3 (2020).
- [16] Hendry, Annett, Bhatia, Damerell, Fielding, Firing, et al. "Equity at sea: Gender and inclusivity in UK sea-going science". *Ocean Challenge* (2020).
- [15] Sutherland, Straneo, Moon, Le Bras, **Frajka-Williams**, Bamber, et al. *Freshwater fluxes from the Greenland Ice Sheet*. 2019. doi: 10.18739/A24M9198B.
- [14] **Frajka-Williams**. "Topographic eddies". *Reference Module in Earth Systems and Environmental Sciences*. Elsevier, 2018. doi: 10.1016/B978-0-12-409548-9.10852-8.
- [13] Frajka-Williams. RV Walton Smith Cruise WS17305, 31 Oct 10 Nov 2017, Miami to Miami, USA. MerMEED microstructure cruise report. Tech. rep. NOC cruise report-50. National Oceanography Centre, Southampton, 2018.
- [12] Frajka-Williams and Griffies. Boaty's second big adventure in the Orkney Passage. https://dynopocruise2017.blogspot.co.uk/2017/04/boatys-second-big-adventure-in-orkney.html. Blog. 2017.
- [11] **Frajka-Williams** and Templeton. *Boaty McBoatface M44 in Orkney Passage*. https://vimeo.com/eleanorfrajka/boaty-mcboatface-m44-dynopo. Animation. Viewed 45,000 times. Vimeo, 2017.
- [10] Frajka-Williams. RV Walton Smith Cruise WS16336, 01 07 Dec 2016, Miami to Miami, USA. MerMEED microstructure cruise report. Tech. rep. NOC cruise report-44. National Oceanography Centre, Southampton, 2017.
- [9] Duchez, Desbruyéres, Hirschi, **Frajka-Williams**, Josey, and Evans. "The tale of a surprisingly cold blob in the North Atlantic". *US CLIVAR Variations* (2016).
- [8] Duchez, **Frajka-Williams**, Josey, Evans, Grist, Marsh, et al. "Cold ocean = hot summer?" *Environmental Science Journal for Teens* (2016).
- [7] **Frajka-Williams**. "Women in Oceanography: A decade later". *The Oceanography Society magazine* (2014).
- [6] **Frajka-Williams**. "RAPID: Observations of the meridional overturning circulation at 26°N". *UK Challenger Society: Ocean Challenge* (2011).
- [5] Johns and **Frajka-Williams**. *RV Knorr Cruise KN200-4, 13 Apr–3 May 2011. RAPID Mooring Cruise*. Tech. rep. NOC cruise report-07. National Oceanography Centre, Southampton, 2011.

- [4] **Frajka-Williams**. "The spring phytoplankton bloom and vertical velocities in stratified and deep convecting Labrador Sea, as observed by Seagliders". PhD thesis. Seattle, WA: College of Ocean and Fishery Sciences, University of Washington, 2009.
- [3] Martini, **Frajka-Williams**, and Mouw. "Conference Report | The Pattullo Conference: Building community through mentoring". *The Oceanography Society magazine* (2009). doi: 10.5670/oceanog.2009.26.
- [2] **Frajka-Williams**, Kunze, and MacKinnon. "Bispectra of Internal Tides and Parametric Subharmonic Instability". *arXiv* (2005). doi: physics.ao-ph:1410.0926.
- [1] **Frajka-Williams**. "Convection in a Fluid Loop". *Proceedings of the WHOI Geophysical Fluid Dynamics program*. with Raffaele Ferrari. 2004.

Selected seminars & Invited talks (as presenter)

2022: AMOC meeting, Royal Society, London (invited talk)

AANChOR AAORIA Workshop, Washington D.C (talk)

UG2 Glider workshop, Seattle (poster)

2021: Leeds, UK (seminar)

NOC Science & Technology Advisory Committee, UK (talk)

FDSE summer school, Cambridge, UK (lecture)

Nordic Overflows workshop, virtual (talk)

CANAIMOC meeting, virtual (talk) EGU General Assembly, virtual (pico)

2020: OceanSITES, virtual (invited panelist)

NOC Board, UK (talk)

IOCAG, Canary Islands (seminar)

Oxford University, UK (seminar)

UK MetOffice, UK (talk)

Imperial College London, UK (seminar)

2019: Marine Autonomy & Technology Showcase, Southampton, UK (talk)

GFDL, Princeton, New Jersey (seminar)

Newcastle University, Newcastle, UK (seminar)

RRS Sir David Attenborough launch, Birkenhead, UK (talk)

OceanObs19, Honolulu, Hawaii (poster)

AMOC Metrics, Honolulu, Hawaii (invited talk)

NERC Science Committee, Swindon, UK (talk)

NOC Association, London, UK (talk)

CLASS annual science meeting, Plymouth, UK (talk)

EGU General Assembly, Vienna, Austria (poster)

Royal Society West Indies meeting, Chicheley, UK (poster)

RAPID International Review, London, UK (talk)

2018: Marine Autonomy & Technology Showcase, Southampton, UK (talk)

University College London, London, UK (seminar)

Challenger Society for Marine Science, Newcastle, UK (talk)

US AMOC/UK RAPID International Meeting, Miami, FL (invited talk)

University of East Anglia, Norwich, UK (seminar)

Ocean Sciences meeting, Portland, OR (talk)

Cambridge University, Cambridge, UK (seminar)

2017: Marine Autonomy & Technology Showcase, Southampton, UK (talk) RAPID/OSNAP/ACSIS meeting, Oxford, UK (poster) Oceans and Climate public lecture, The Royal Society, London (keynote) IAPSO meeting, Cape Town, South Africa (talk) Liege Colloquium on Turbulence, Liege, Brussels (poster) NOC Friday Seminar, Southampton, UK (seminar) 2016: EGO Glider meeting, Southampton, UK (poster) NOAA/AOML, Miami, FL (seminar) Woods Hole Oceanographic Institute, Woods Hole, MA (seminar) NASA JPL, Pasadena, CA (seminar) University of Washington, Seattle, WA (seminar) 2015: RAPID International Science Meeting, Bristol, UK (talk) IUGG General Assembly, Prague, Czech Republic (talk & panel member) CLIVAR Climate Process Team meeting, La Jolla, CA University of Washington, Seattle, WA (seminar) AGU fall meeting, San Francisco, CA (talk) 2014: Ocean Sciences, Honolulu, HI (talk) National Oceanography Centre, Liverpool, UK (seminar) Oxford University, Oxford, UK (seminar) 2013: IAPSO meeting, Gothenberg, Sweden (talk) Challenger Society: Prospectus 2013, Royal Society, London (invited talk) EGU General Assembly, Vienna, Austria (talk) University of Washington, Seattle, WA (seminar) University of East Anglia, Norwich, UK (seminar) AGU Fall Meeting, San Francisco, CA (poster) 2012: Bangor University, Bangor, UK (seminar) THOR meeting in Hamburg, Germany. (talk) British Antarctic Survey, Cambridge, UK (seminar) Time series conference in Brest, France (invited talk) USAMOC meeting, Boulder, CO (poster) EGU General Assembly, Vienna, Austria (talk) AGU Ocean Sciences, Salt Lake City, UT (poster) 2011: WCRP meeting, Denver, CO (poster) RAPID International Science Meeting, Bristol, UK (talk) ZMAW/Klimacampus, Max-Planck-Institut fur Meteorologie, Hamburg (seminar) IUGG General Assembly, Melbourne, Australia (talk) IUGG General Assembly, Melbourne, Australia (poster) 2010: Challenger Society for Marine Science, Southampton, UK (poster) AGU Ocean Sciences, Portland, OR (talk) Imperial College London, London, UK (seminar) University of Liverpool, Liverpool, UK (seminar) POETS NOC, Southampton, UK (seminar) NOC PO Seminar, Southampton, UK (seminar) 2009: ESSAS 2009 Annual Science meeting, Seattle, WA (invited talk) PO and Climate, Southampton, UK (seminar) University of Washington, Seattle, WA (seminar)

Woods Hole Oceanographic Institution, Woods Hole, MA (seminar) Physical Oceanography Dissertation Sympsium. Honolulu, HI (talk)

2008:	Ocean Sciences meeting, Orlando, FL (Outstanding Student Talk award) MPOWIR Pattullo Conference, Charleston, SC (talk)
2006:	Ocean Sciences meeting, Honolulu, HI (poster)
2005:	EGU General Assembly, Vienna, Austria (poster)
2004:	American Physical Society, Seattle, WA (talk)
	SCOR IAPSO conference on Mixing, Victoria, Canada (poster)
	AGU Ocean Sciences, Portland, OR (poster)
2003:	Hawaiian Ocean Mixing Experiment workshop, Mt. Hood, OR (talk)
2002:	EGU General Assembly, Nice, France (poster)