

Sabrina Speich – *Curriculum Vitae*



Full Professor of Physical Oceanography and Climate Sciences

Ecole Normale Supérieure – Department of Geosciences

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KEY WORDS: Climate sciences; Physical oceanography; Ocean changes and impact on climate at regional and global scale; Air–sea exchanges and changes; Shaping of the ocean dynamics and climate change on marine ecosystems.

EDUCATION

- 2008** “Diplôme d’Habilitation à diriger des Recherches” (HDR, equivalent to the D. Sc. in the United Kingdom, to the “Libera docenza” in Italy, to the German “Habilitation”) in Physical Oceanography and Climate Sciences, Université de Bretagne Occidentale, Brest, France;
- 1992** Ph.D. in Physical Oceanography, Université Pierre et Marie Curie, Paris;
- 1989** Laurea in Physics, Università degli Studi, Trieste, Italy.

CAREER

- Since **2017** Associated Professor, SciencesPo, Paris, France;
- Since **2013** Full Professor (PR EX2), Department of Geosciences at the École Normale Supérieure (ENS) of Paris & LMD–IPSL UMR 8539, Paris, France;
- 2009–2013** Full Professor, Department of Physics at the "Université de Bretagne Occidentale", & LPO, Brest, France;
- 1995–2009** Assistant Professor, Department of Physics at the "Université de Bretagne Occidentale", Brest, France.
- 1994–1995** Research associate, LOCEAN, CNRS, Paris, France
- 1992–1994** Postdoctoral researcher, Department of Atmospheric Sciences, UCLA, CA, USA

RESEARCH INTERESTS

I am a physical oceanographer with three decades of experience in modelling and conceiving large international observing projects to better assess ocean and climate processes and monitor changes. The approach I favored during the last 15 years is to promote interdisciplinary studies to understand the ocean nonlinear dynamics and its impact on biogeochemistry, marine biome and ecosystems and the atmosphere. I am also working together with the international community (within projects and organizations) to improve the ocean observing strategy and capacity. Indeed, the ocean is key to the future of humanity challenged by a rapidly changing climate.

AWARDS AND HONORS (SELECT):

- 2023** Elected Member of the European Academy of Science
- 2019** Awarded the Albert Defant Medal by the German Meteorological Society (DMG: <https://www.dmg-ev.de/aktivitaeten/auszeichnungen/albert-defant-medaille/>)
- Since **2002** Recipient of the National Research and PhD Supervision award

SCIENTIFIC TRAINING SERVICES

I have trained about 20 PhD and 20 postdoctoral researchers and more than 50 Master students. I have been invited in more than 50 PhD external (10 international) thesis jury as examiner.

- Since **2023** Member of the Scientific Council, ENS
- Since **2014** Member of the Doctoral School College, ED129 – Climate Sciences, IPSL, Paris
- 2014–2019** Dean of Studies of the Geosciences Department, ENS
- 2010–2013** Deputy Director of the Doctoral School on Marine Sciences, IUEM, UBO, Brest, France
- 2010–2013** Deputy Director, Department of Physics at the "Université de Bretagne Occidentale", Brest, France

PUBLICATIONS

I have published more than 120 publications on international journals, have been invited to over 40 conferences as a keynote speaker, and I have led several national and international research projects. Among them there are multidisciplinary contributions to Nature and Science. My publication record showcases my scientific interdisciplinary approach. My current h-index is: 43 (Web of Science), 46 (Scopus), 52 (Semantic Scholar), 54 (Google Scholar).

<http://orcid.org/0000-0002-5452-8287>

<https://www.scopus.com/authid/detail.uri?authorId=6602115663>

<https://loop.frontiersin.org/people/457867/network>

<https://www.webofscience.com/wos/author/record/747772>

<https://scholar.google.fr/citations?user=G0VWQsEAAAAJ&hl=fr&authuser=1>

<https://www.semanticscholar.org/author/S.-Speich/2154189>

KEYNOTES AND CONFERENCES

I gave many invited talks and seminars at international conferences, workshops and institutes. These include keynotes at different Ocean Sciences, AGU and EGU conferences and lectures in various Academic Institutions such as MIT, WHOI, Scripps, UCLA, URI, GEOMAR, the French Ministries of Research and Ecological Transition, the Collège de France and ENS. I have been the chair/co-chair of scientific committees for various conferences, workshops and specific high-level events. Among others: OceanObs19 (Hawaii, 2019: <https://www.oceanobs19.net>; 1500 participants), the 2nd Climate Observations Conference (Germany, 2022: <https://gcos.wmo.int/en/news/important-2nd-climate-observation-conference-17-19-october-2022-darmstadt-germany-submit-your>; 300 participants), the “Ocean Mesoscale Eddy Interactions with the Atmosphere” CLIVAR workshop (Oregon, 2018; Robinson et al. 2018; 50 participants upon invitation); the Trimester on “Mathematics for Climate and the Environment (Paris, 2019: <https://www.ihp.fr/en/news-research-activities/t3-2019-mathematics-climate-and-environment>).

RECENT OCEANOGRAPHIC CRUISES

- Yearly** Short (1 week) training cruise for the ENS Master students on board of the French RV Tethys
- 2020** EUREC4A-OA cruise, January – February 2020, Tropical North Atlantic, RV Atalante Chief Scientist (<https://doi.org/10.17600/18000670>).
- 2017** SAMOC/AtlantOS MSM60 cruise, January 2017 South Atlantic, RV Merian Co-Chief Scientist.
- 2016** AtlantOS M124 cruise, February–March 2016 South Atlantic, RV Meteor. Co-Chief Scientist.
- 2012** Oceanographic cruise TARAOCEANS RV Tara. Co-PI Physical Oceanography and Climate.

RECENT RESPONSABILITIES IN INTERNATIONAL COMMITTEES

- 2023** GCOS co-chair;
- 2021–2024** Co-chair, Ocean Observing Co-Design (ObsCoDe): A Programme under the UN Decade of Ocean Science for Sustainable Development (<https://www.oceandecade.org>);
- 2021–2024** WCRP CLIVAR-AMOC Science Team member;
- 2021–2023** WCRP ESMO SSG Member;
- Since **2020** Co-chair, Ocean Observations Physics and Climate panel (GCOS, GOOS, WCRP);
- 2018–2021** Co-chair of the Tropical Atlantic Observing System review committee;
- 2015–2021** Co-chair, WCRP Atlantic CLIVAR Panel.

RECENT RESEARCH PROJECT RESPONSABILITIES AT INTERNATIONAL LEVEL

- Since **2024** PI ERC Synergy WHIRLS (<https://www.ipsl.fr/en/article/whirls-small-ocean-eddies-with-a-major-impact-on-climate-and-marine-life/>)
- Since **2024** Co-coordinator EU H2030 ObsSea4Clim project (<https://obssea4clim.eu>)
- Since **2022** WP co-leader of the Ocean:Ice Europe 2030 project.
- Since **2020** Coordinator of the EUREC4A-OA JPI Ocean & Climate project international project (<http://www.jpi-oceans.eu/news-events/news/eurec4a-project-launches-its-first-international-campaign-barbados-exploring-ocean>).