

# ALEXANDRA JAHN

Department of Atmospheric and Oceanic Sciences and Institute of Arctic and Alpine Research  
University of Colorado Boulder, Campus Box 450, Boulder, CO 80309-0450, USA

☎ +1-303-735-3352 ✉ alexandra.jahn@colorado.edu

🏠 www.instaar.colorado.edu/people/alexandra-jahn 🐦 @SeaIceClimate

## ACADEMIC APPOINTMENTS

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- 08/2021 –** Associate Professor, Dept. of Atmospheric & Oceanic Sciences, CU Boulder, USA  
Graduate Program Director, Dept. of Atmospheric & Oceanic Sci., since 08/2023  
Senior Fellow, Institute of Arctic and Alpine Research, CU Boulder, USA
- 2015 – 2021** Assistant Professor, Dept. of Atmospheric & Oceanic Sciences, CU Boulder, USA  
Fellow, Institute of Arctic and Alpine Research, CU Boulder, USA
- 2012 – 2014** Project Scientist 1, National Center for Atmospheric Research (NCAR), USA
- 2010 – 2012** Advanced Study Program Postdoctoral Fellow, NCAR, USA

## UNIVERSITY EDUCATION

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- 2004–2010** PhD, Dept. of Atmospheric & Oceanic Sciences at McGill University, Canada
- 1998–2004** Diplom, Dept. of Meteorology at the Free University of Berlin, Germany. Thesis work at Potsdam Institute for Climate Impact Research, Germany. Master of Science equivalent, includes undergraduate studies without separate degree
- 2001/02** Exchange student, Atmospheric Sciences, University of Washington, Seattle, USA

## FUNDED PROPOSALS (\$7.07 MILLION TOTAL, \$2.16 MILLION DIRECTLY TO JAHN AT CU)

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- 2022, NSF** Collaborative Research: CAS-MNP: Sea ice-ocean exchange of Arctic microplastics: linking small scales to the large-scale system, PI: M. Steele (UW), co-PIs: A. Jahn (CU), M. Smith (WHOI), B. Light (UW), M. Orellana (UW), D. Bailey (NCAR), 2022–2026, \$3,354,579 total, of that \$590,883 to Jahn.
- 2019, NSF** CAREER: Reducing the projection uncertainty for Arctic sea ice loss, PI: A. Jahn, 2019–2024, \$819,991.
- 2019, NSF** The Arctic Observing Network: Sustained Observations at the Davis Strait Gateway, PI: C. Lee (UW), co-PIs: A. Jahn, Jason Gobat (UW), Kathleen M. Stafford (UW), collaborator: P. Myers (Univ. Alberta), 2019–2024, \$3,669,176, of that \$385,799 to Jahn.
- 2019, NSF** Integrating Eocene Shark Paleoecology and Climate Modeling to reveal Southern Ocean Circulation and Antarctic Glaciation, PI: S. Kim (UC - Merced), co-PIs: A. Jahn, M. Huber (Purdue), H. Scher (USC), 2019–2024, \$849,376, of that \$78,056 to Jahn.
- 2019, NASA** Using a Satellite Simulator to Better Evaluate and Understand Arctic Sea Ice Melt, Future Investigators in NASA Earth and Space Science and Technology (FINESST)<sup>a</sup>, PI: A. Jahn, Future Investigator: A. Smith, 2019–2021, \$90,000.
- 2018, NSF** Timing and Paleoceanographic Impacts of the Onset of Arctic-Baffin Bay Throughflow, PI: A. Jennings (CU), co-PIs: A. Jahn, J. Andrews (CU), J. Sepulveda (CU), T. Marchitto (CU), 2018–2024, \$668,325 to CU, of that \$133,666 to Jahn.

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<sup>a</sup>FINESST supports graduate student designed and performed research projects, with a research mentor as PI.

- 2016, NSF **Carbon Isotope and geotracer-enabled Transient Climate Evolution of the Deglacial Ocean (C-iTRACE-O)**, PI: **A. Jahn**, co-PI: Z. Liu (Ohio State), 2016–2021, \$559,995, of that \$301,994 to Jahn.
- 2015, NSF **Assessing the simulated Arctic freshwater system in CMIP5 models, the CESM large ensemble, and forced simulations**, PI: **A. Jahn**, co-PIs: M. Holland (NCAR), B. Tremblay (Columbia Univ), 2015–2020, \$411,251, of that \$351,004 to Jahn.

FELLOWSHIPS AND AWARDS (\$244,500 TOTAL, EXCLUDING CAREER)

- 2022–2023 **Alexander von Humboldt Fellowship for Experienced Researchers**  
\$30,000 in support for a research stay in Germany.
- 2019–2024 **NSF-CAREER award**  
Proposal-based single PI NSF award for early career faculty, to support the development of both research and educational goals over 5 years. CAREER funding is included in the total under proposals.
- 2012 **Christine Mirzayan Science & Techn. Policy Fellowship, National Academies**  
\$8500 in support over 3 months.
- 2010–2012 **Advanced Study Program Postdoctoral Fellowship at NCAR**  
Proposal-based fellowship for two years of self-directed postdoctoral research. \$150,000.
- 2006–2008 **PhD Fellowship, German National Academic Foundation**  
Proposal-based PhD fellowship from the German National Academic Foundation (Studienstiftung des deutschen Volkes). \$55,000.
- 2001–2002 **Fulbright Travel Award and Exchange Fellowship from FU Berlin**  
For studies at the University of Washington in Seattle, USA. \$15,000.
- 2001–2004 **Student Fellowship, German National Academic Foundation**  
Merit-based fellowship from the German National Academic Foundation. \$16,000.

SUPERCOMPUTER GRANTS AWARDED (12 MILLION CORE HOURS TOTAL)

- 2022 **NCAR-CISL**, 3.6 million core hours on NSF’s Cheyenne supercomputer for the project “Modeling the Eocene Ocean with Neodymium Isotopes for comparisons with proxy records”, 2022-2023, PI: **A. Jahn**.
- 2022 **NCAR-CISL**, 200,000 core hours on NSF’s Cheyenne supercomputer for the project “Understanding Davis Strait fluxes with modeling and with renewed observations”, 2022–2024, PI: **A. Jahn**.
- 2022 **NCAR-CISL**, 400,000 core hours on NSF’s Cheyenne supercomputer for the project “Sea ice-ocean exchange of Arctic microplastics: linking small scales to the large-scale system”, 2022–2026, PI: **A. Jahn**.
- 2019 **NCAR-CISL**, 300,000 core hours on NSF’s Cheyenne supercomputer for the project “CAREER: Reducing the projection uncertainty for Arctic sea ice loss”, 2019–2024, PI: **A. Jahn**.
- 2019 **NCAR-CISL**, 200,000 core hours on NSF’s Cheyenne supercomputer for the project “Integrating Eocene Shark Paleoecology and Climate Modeling to reveal Southern Ocean Circulation and Antarctic Glaciation”, 2019–2023, PI: **A. Jahn**.
- 2018 **NCAR-CISL**, 1.3 million core hours on NSF’s Cheyenne supercomputer for the project “Paleoceanographic Impacts of the Onset of Arctic-Baffin Bay Throughflow”, 2018–2023, PI: **A. Jahn**.
- 2016 **NCAR-CISL**, 3.2 million core-hours on NSF’s Yellowstone & Cheyenne supercomputers for the project “Carbon Isotope and geotracer-enabled ocean simulations for present-day and the Last Glacial Maximum”, 2016–2022, PI: **A. Jahn**.

- 2016,17,18** NCAR-CISL, 20,000 core hour classroom allocations on NSF’s Yellowstone & Cheyenne supercomputers in the fall semesters of 2016 & 2017 & 2018, to teach students in “Introduction to Physical Oceanography” how to use a supercomputer and run CESM, PI: **A. Jahn**.
- 2015** NCAR-CISL, 3.5 million core hours on NSF’s Yellowstone & Cheyenne supercomputers for the project “Mechanisms leading to synchronous snowline depression throughout the northern North Atlantic during the Late Holocene”, 2015–2018, PI: G. Miller, co-PI: **A. Jahn**.
- 2015** NCAR-CISL, 528,000 core hours on NSF’s Yellowstone & Cheyenne supercomputers for the project “Using Arctic freshwater tracers to assess changes and variability of the Arctic freshwater budget”, 2015-2020, PI: **A. Jahn**.

## REFEREED PUBLICATIONS

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**54 total published**

**11 first authored by Jahn, 10 first authored by direct advisees of Jahn**

**ORCID iD:0000-0002-6580-2579**

**Web of science** h-index = 29; 3,339 citations.

**Google Scholar** h-index = 34; 4,746 citations.

<sup>1</sup> = Jahn as primary advisor for student or postdoc

<sup>2</sup> = Jahn as secondary advisor/mentor for student or postdoc

## Published/Accepted

54. **2024: Jahn, A.**, M.M. Holland, J.E. Kay, Projections of an ice-free Arctic, in press in *Nature Reviews Earth and Environment*.
53. **2024:** Holland, M. M., Hannay, C., Fasullo, J., **Jahn, A.**, Kay, J. E., Mills, M., Simpson, I. R., Wieder, W., Lawrence, P., Kluzek, E., and Bailey, D.: New model ensemble reveals how forcing uncertainty and model structure alter climate simulated across CMIP generations of the Community Earth System Model, in press in *Geosci. Model Dev.*, preprint available at <https://doi.org/10.5194/gmd-2023-125>.
52. **2023:** Miller, G.H., S.L. Pendleton, **A. Jahn**, Y. Zhong, J.T. Andrews, S. J. Lehman, J.P. Briner, J.H. Raberg, H. Bueltmann, M. Raynolds, A. Geirsdóttir, J.R. Southon, Moss kill-dates and modeled summer temperature track episodic snowline lowering and ice-cap expansion in Arctic Canada through the Common Era, *Climate of the Past*, doi:10.5194/cp-19-2341-2023.
51. **2022: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Modeled Interannual Variability of Arctic Sea Ice Cover is Within Observational Uncertainty, *Journal of Climate*, doi:10.1175/JCLI-D-21-0958.1.
50. **2022: Zanowski, H.**<sup>1</sup>, **A. Jahn**, S. Gu, Z. Liu, T.M. Marchitto, Decomposition of deglacial Pacific radiocarbon age controls using an isotope-enabled ocean model. *Paleoceanography and Paleoclimatology*, Vol. 37, doi:10.1029/2021PA004363.
49. **2022: Smith, A.**<sup>1</sup>, **A. Jahn**, C. Burgard, D. Notz, Improving model-satellite comparisons of sea ice melt onset with a satellite simulator, *The Cryosphere*, 16, 3235–3248, doi:10.5194/tc-16-3235-2022.
48. **2022: DeRepentigny, P.**<sup>1</sup>, **A. Jahn**, M. Holland, J. Fasulo, J.-F. Lamarque, C. Hannay, J. Kay, M. Mills, D. Bailey, S. Tilmes, A. Barrett, Enhanced simulated early 21st century Arctic sea ice loss due to CMIP6 biomass burning emissions, *Science Advances*, Vol. 8, Issue 30, doi:10.1126/sciadv.abo2405.
47. **2022:** Ford, H.L., N.J. Burls, P. Jacobs, **A. Jahn**, R.P. Caballero-Gill, D.A. Hodell and A.V. Fedorov, Sustained mid-Pliocene warmth led to deep water formation in the North Pacific, *Nature Geoscience*, Vol 15, doi:10.1038/s41561-022-00978-3.
46. **2022:** Kay, J.E., **P. DeRepentigny**<sup>1</sup>, M.M. Holland, D.A. Bailey, A.K. DuVivier, E. Blanchard-Wrigglesworth, C. Deser, **A. Jahn**, H. Singh, M.M. Smith, M.A. Webster, J. Edwards, S.-S. Lee, K.B. Rodgers, N. Rosenbloom, Less surface sea ice melt in the CESM2 improves Arctic sea ice simulation with minimal non-polar climate impacts, *Journal of Advances in Modeling Earth Systems*, Vol. 14, doi: 10.1029/2021MS002679.

45. **2022:** Fasullo, J. T., J. F. Lamarque, C. Hannay, N. Rosenblum, S. Tilmes, **P. DeRepentigny**<sup>1</sup>, **A. Jahn**, C. Deser, Spurious Late Historical-Era Warming in CESM2 Driven By Prescribed Biomass Burning Emissions, *Geophysical Research Letters*, doi:10.1029/2021GL097420.
44. **2021:** Gu, S., Z. Liu, D.W. Oppo, J. Lynch-Stieglitz, **A. Jahn**, J. Zhang, K. Lindsay, L. Wu, Remineralization dominating the  $\delta^{13}C$  decrease in the mid-depth Atlantic during the last deglaciation, *Earth and Planetary Science Letters*, 571, doi:10.1016/j.epsl.2021.117106.
43. **2021:** A. Crawford, J. Stroeve, **A. Smith**<sup>1</sup>, **A. Jahn**, Dramatic Lengthening of Arctic Open-Water Periods by 2100 in CMIP6 Models, *Communications Earth and Environment*, 2, doi:10.1038/s43247-021-00183-x.
42. **2021:** Horvath, A., J. Stroeve, R. Balaji, **A. Jahn**, Arctic sea ice melt onset favored by an atmospheric pressure pattern reminiscent of the North American-Eurasian Arctic Dipole Pattern, *Climate Dynamics*, doi:10.1007/s00382-021-05776-y.
41. **2021:** **Zanowski, H.**<sup>1</sup>, **A. Jahn**, M. Holland, Arctic Ocean freshwater in CMIP6 ensembles: Declining sea ice, increasing ocean storage and export. *J Geophys Res-Oceans*, 126, doi:10.1029/2020JC016930.
40. **2021:** He, C., Z. Liu, B. L. Otto-Bliesner, E.C. Brady, C. Zhu, R. Tomas, P.U. Clark, J. Zhu, **A. Jahn**, S. Gu, J. Zhang, J. Nusbaumer, D. Noone, H. Cheng, Y. Wang, M. Yan, Y. Bao, Hydroclimate footprint of pan-Asian monsoon water isotope during the last deglaciation, *Scientific Advances*, 7, doi:10.1126/sciadv.abe2611.
39. **2020:** **Jahn, A.** and **R. Laiho**<sup>1</sup>, Forced Changes in the Arctic Freshwater Budget Emerge in the Early 21st Century, *Geophysic. Res. Lett.*, 47, doi:10.1029/2020GL088854, *Press release, Press coverage*, Nature Climate Change Research Highlight, GRL Commentary.
38. **2020:** **Smith, A.**<sup>1</sup>, **A. Jahn**, M. Wang, Seasonal transition dates can reveal biases in Arctic sea ice simulations, *The Cryosphere*, 14, 2977–2997, doi:10.5194/tc-14-2977-2020.
37. **2020:** **DeRepentigny, P.**<sup>1</sup>, **A. Jahn**, M. Holland, **A. Smith**<sup>1</sup>, Arctic Sea Ice in Two Configurations of the Community Earth System Model Version 2 (CESM2) During the 20<sup>th</sup> and 21<sup>st</sup> Centuries, *J Geophys Res-Oceans*, 125, doi:10.1029/2020JC016133.
36. **2020:** Gu, S.<sup>2</sup>, Z. Liu, D.W. Oppo, J. Lynch-Stieglitz, **A. Jahn**, J. Zhang, L. Wu, Assessing the potential capability of reconstructing glacial Atlantic water masses and AMOC using multiple proxies in CESM, *Earth and Planetary Science Letters*, 541, 116294, doi:10.1016/j.epsl.2020.116294.
35. **2020:** Notz and SIMIP Community (including **P. DeRepentigny**<sup>1</sup> and **A. Jahn**), Arctic Sea Ice in CMIP6, *Geophys. Res. Lett.*, 47, doi:10.1029/2019GL086749, *Press coverage*.
34. **2020:** **DeRepentigny, P.**<sup>1</sup>, **A. Jahn**, L. B. Tremblay, R. Newton, S. Pfirman, Increased transnational sea ice transport between neighboring Arctic states in the 21st century. *Earth's Future*, 8, doi:10.1029/2019EF001284. *Press release, Press coverage*.
33. **2019:** England, M.<sup>2</sup>, **A. Jahn**, L. Polvani, Non-uniform contribution of natural variability to recent Arctic sea-ice loss, *J. Climate*, 32, 4039–4053, doi:10.1175/JCLI-D-18-0864.1.
32. **2019:** Gu, S.<sup>2</sup>, Z. Liu, J. Lynch-Stieglitz, **A. Jahn**, J. Zhang, K. Lindsay, L. Wu, Assessing the Ability of Zonal  $\delta^{18}O$  Contrast in Benthic Foraminifera to Reconstruct Deglacial Evolution of Atlantic Meridional Overturning Circulation, *Paleoceanography and Paleoclimatology*, 34, 800–812, doi:10.1029/2019PA003564.
31. **2019:** Gu, S.<sup>2</sup>, Z. Liu, **A. Jahn**, J. Rempfer, J. Zhang, F. Joos, Modelling neodymium isotopes in the ocean component of the Community Earth System Model (CESM1), *Journal of Advances in Modeling Earth Systems*, 11, 624–640. doi:10.1029/2018MS001538.
30. **2019:** Eyring, V., P. Cox, G. Flato, P. Gleckler, G. Abramowitz, P. Caldwell, W. Collins, B. Gier, A. Hall, F. Hoffman, G. Hurtt, **A. Jahn**, C. Jones, S. Klein, J. Krasting, L. Kwiatkowski, R. Lorenz, E. Maloney, G. Meehl, A. Pendergrass, R. Pincus, A. Ruane, J. Russell, B. Sanderson, B. Santer, S. Sherwood, I. Simpson, R. Stouffer, M. Williamson, Taking climate model evaluation to the next level, 9, 102–110, *Nature Climate Change*, doi:10.1038/s41558-018-0355-y.
29. **2019:** **Smith, A.**<sup>1</sup>, **A. Jahn**, Definition differences and internal variability affect the simulated Arctic sea ice melt season, *The Cryosphere*, 13, 1–20, doi:10.5194/tc-13-1-2019.



28. **2018: Zhong, Y.<sup>1</sup>, A. Jahn**, G. H. Miller, A. Geirsdottir, Asymmetric Cooling of the Atlantic and Pacific Arctic during the Past Two Millennia: A Dual Observation-Modeling Study, 45, *Geophys. Res. Lett.*, doi:10.1029/2018GL079447.
27. **2018: Jahn, A.**, Reduced probability of ice-free summers for 1.5 °C compared to 2.0 °C warming, *Nature Climate Change*, 8, 409–413 doi:10.1038/s41558-018-0127-8. *Press release, Press coverage.*
26. **2017: Zhu, J., Z. Liu, E. Brady, B. Otto-Bliesner, S. Marcott, J. Zhang, X. Wang, J. Nusbaumer, T. Wong, A. Jahn, D. Noone**, Investigating the direct meltwater effect in terrestrial oxygen-isotope paleoclimate records using an isotope-enabled Earth system model, *Geophys. Res. Lett.*, 44, doi:10.1002/2017GL076253.
25. **2017: Pendleton, S.L., G. Miller, R. A. Anderson, S. E. Crump, Y. Zhong<sup>1</sup>, A. Jahn**, A. Geirsdottir, Episodic Neoglacial expansion and rapid 20th Century retreat of a small ice cap on Baffin Island, Arctic Canada, *Climate of the Past*, 13, 1527–1537, doi:10.5194/cp-2017-27.
24. **2017: Zhang, J., Z. Liu, E. C. Brady, A. Jahn, K. Lindsay, D. W. Oppo, P. U. Clark, S. A. Marcott**, Asynchronous warming and  $\delta^{18}\text{O}$  evolution of deep Atlantic water masses during the last deglaciation, *Proc Natl Acad Sci USA*, doi:10.1073/pnas.1704512114.
23. **2017: Sanderson, B., Y. Xu, C. Tebaldi, M. Wehner, B. O’Neill, A. Jahn, A. Pendergrass, F. Lehner, W. Strand, L. Lin, R. Knutti, J.-F. Lamarque**, Community Climate Simulations to assess avoided impacts in 1.5 °C and 2 °C futures, *Earth Syst. Dynam.*, 8, 827–847, doi:10.5194/esd-8-827-2017.
22. **2017: Zhu, J., Z. Liu, E. Brady, B. Otto-Bliesner, J. Zhang, D. Noone, R. Tomas, J. Nusbaumer, T. Wong, A. Jahn, C. Tabor**, Reduced ENSO Variability at the LGM Revealed by an Isotope-enabled Earth System Model, *Geophys. Res. Lett.*, 44, doi:10.1002/2017GL073406.
21. **2017: Otto-Bliesner, B. L., A. Jahn, R. Feng, E. C. Brady, A. Hu, M. Löffverström**, Amplified North Atlantic warming in the late Pliocene by changes in Arctic gateways, *Geophys. Res. Lett.*, 44, doi:10.1002/2016GL071805.
20. **2016: Jahn, A., J. E. Kay, M.M. Holland, D. M. Hall**, How predictable is the timing of a summer ice-free Arctic?, *Geophys. Res. Lett.*, 43, 9113–9120, doi:10.1002/2016GL070067. *Press release, Press coverage.*
19. **2016: Notz, D., A. Jahn, M. Holland, E. Hunke, F. Massonnet, J. Stroeve, B. Tremblay, M. Vancoppenolle**, The CMIP6 Sea-Ice Model Intercomparison Project (SIMIP): Understanding sea ice through climate-model simulations, *Geophys. Mod. Develop.*, 9, 3427–3446, doi:10.5194/gmd-9-3427-2016.
18. **2016: Otto-Bliesner, B., E. Brady, J. Fasullo, A. Jahn, L. Landrum, S. Stevenson, N. Rosenbloom, A. Mai, G. Strand**, Climate Variability and Change since 850 C.E.: An Ensemble Approach with the Community Earth System Model (CESM), *Bull. Am. Meteorol. Soc.*, 97(5), 735–754, doi:https://doi.org/10.1175/BAMS-D-14-00233.1.
17. **2016: Ilicak, M., H. Drange, Q. Wang, R. Gerdes, Y. Aksenov, D. Bailey, M. Bentsen, A. Biastoch, A. Bozec, C. Böning, C. Cassou, E. Chassignet, A. C. Coward, B. Curry, G. Danabasoglu, S. Danilov, E. Fernandez, P. G. Fogli, Y. Fujii, S. M. Griffies, D. Iovino, A. Jahn, T. Jung, W. G. Large, C. Lee, C. Lique, J. Lu, S. Masina, A. J. G. Nurser, C. Roth, D. S. y Mélia, B. L. Samuels, P. Spence, H. Tsujino, S. Valcke, A. Voldoire, X. Wang, S. G. Yeager**, An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part III: Hydrography and fluxes, *Ocean Modelling*, 100, 141–161, doi:10.1016/j.ocemod.2016.02.004.
16. **2016: Wang, Q., M. Ilicak, R. Gerdes, H. Drange, Y. Aksenov, D. A Bailey, M. Bentsen, A. Biastoch, A. Bozec, C. Böning, C. Cassou, E. Chassignet, A. C. Coward, B. Curry, G. Danabasoglu, S. Danilov, E. Fernandez, P. G. Fogli, Y. Fujii, S. M. Griffies, D. Iovino, A. Jahn, T. Jung, W. G. Large, C. Lee, C. Lique, J. Lu, S. Masina, A.J. G. Nurser, B. Rabe, C. Roth, D. S. y Mélia, B. L. Samuels, P. Spence, H. Tsujino, S. Valcke, A. Voldoire, X. Wang, S. G. Yeager**, An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part II: Liquid freshwater, *Ocean Modelling*, 99, 86–109, doi:10.1016/j.ocemod.2015.12.009.
15. **2016: Wang, Q., M. Ilicak, R. Gerdes, H. Drange, Y. Aksenov, D. A Bailey, M. Bentsen, A. Biastoch, A. Bozec, C. Böning, C. Cassou, E. Chassignet, A. C. Coward, B. Curry, G. Danabasoglu, S. Danilov, E. Fernandez, P. G. Fogli, Y. Fujii, S. M. Griffies, D. Iovino, A. Jahn, T. Jung, W. G. Large, C. Lee, C. Lique, J. Lu, S. Masina, A.J. G. Nurser, B. Rabe, C. Roth, D. S. y Mélia, B. L. Samuels, P. Spence, H. Tsujino, S. Valcke, A. Voldoire, X. Wang, S. G. Yeager**, An assessment of the Arctic Ocean in a suite of interannual CORE-II simulations. Part I: Sea ice and solid freshwater, *Ocean Modelling*, 99, 110–132, doi:10.1016/j.ocemod.2015.12.008.

14. **2015: Jahn, A.**, K. Lindsay, X. Giraud, N. Gruber, B. L. Otto-Bliesner, Z. Liu, E. C. Brady, Carbon isotopes in the ocean model of the Community Climate System Model (CESM), *Geophys. Mod. Develop.*, 8, 2419–2434, doi:10.5194/gmd-8-2419-2015.
13. **2015:** Swart, N. C., J. C. Fyfe, E. Hawkins, J. E. Kay, **A. Jahn**, Influence of internal variability on Arctic sea-ice trends, *Nature Climate Change*, 5, 86–89, doi:10.1038/nclimate2483.
12. **2014:** Tilmes, S., **A. Jahn**, J. E. Kay, M. M. Holland, J.-F. Lamarque, Can regional climate engineering save the summer Arctic Sea Ice?, *Geophys. Res. Lett.*, 41(3), doi:10.1002/2013GL058731.
11. **2013: Jahn, A.** and M. M. Holland, Implications of Arctic sea ice changes for North Atlantic deep convection and the meridional overturning circulation in CCSM4-CMIP5 simulations, *Geophys. Res. Lett.*, 40, 6, 1206–1211, doi:10.1002/grl.50183.
10. **2012: Jahn, A.**, Y. Aksenov, B. A. de Cuevas, R. Gerdes, S. Häkkinen, E. Hansen, C. Herbaut, M.-N. Houssais, M. Karcher, C. Lique, A. Nguyen, P. Pemberton, L. de Steur, D. Worthen, J. Zhang, Arctic freshwater - How robust are model simulations?, *J Geophys Res-Oceans*, 117, doi:10.1029/2012JC007907.
9. **2012: Jahn, A.**, K. Sterling, M. M. Holland, J. E. Kay, J. A. Maslanik, C. M. Bitz, D. A. Bailey, J. Stroeve, E. C. Hunke, W. H. Lipscomb, D. A. Pollak<sup>2</sup>, Late 20th century simulation of Arctic sea ice and ocean properties in the CCSM4, *Journal of Climate*, 25(5), 1431–1452, doi:10.1175/JCLI-D-11-00201.1.
8. **2012:** Vavrus, S., M. M. Holland, **A. Jahn**, D. A. Bailey, J. A. Maslanik, B. Blazey, Simulation of the 21st century Arctic climate in the CCSM4, *Journal of Climate*, Vol. 25(8), 2696–2710, doi:10.1175/JCLI-D-11-00220.1.
7. **2012:** Jochum, M., **A. Jahn**, S. Peacock, D. Bailey, J. Fasullo, J. Kay, S. Levis, B. Otto-Bliesner, True to Milankovitch: Glacial Inception in the new Community Climate System Model, *Journal of Climate*, 25(7), 2226–2239, doi:10.1175/JCLI-D-11-00044.1.
6. **2011:** Proshutinsky, A., Y. Aksenov, J. Clement-Kinney, R. Gerdes, E. Golubeva, D. Holland, G. Holloway, **A. Jahn**, M. Johnson, E. Popova, M. Steele, E. Watanabe, Recent advances in Arctic Ocean studies employing models from the Arctic Ocean Model Intercomparison Project, *Oceanography*, 24(3), 102–113, doi:10.5670/oceanog.2011.61.
5. **2011:** Kay, J. E., M. M. Holland, **A. Jahn**, Interannual to Multidecadal Arctic Sea Ice Extent Trends in a Warming World, *Geophys. Res. Lett.*, 38, L15708, doi:10.1029/2011GL048008.
4. **2010: Jahn, A.**, B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, I. A. Dmitrenko, A tracer study of the Arctic Ocean’s liquid freshwater export variability, *J Geophys Res-Oceans*, 115, C07015, doi:10.1029/2009JC005873.
3. **2010: Jahn, A.**, B. Tremblay, L. A. Mysak, R. Newton, Effect of the large-scale atmospheric circulation on the variability of the Arctic Ocean freshwater export, *Climate Dynamics*, 34, 201–222, doi:10.1007/s00382-009-0558-z.
2. **2008:** Tjallingii, R., M. Claussen, J.-B. W. Stuut, J. Fohlmeister, **A. Jahn**, T. Bickert, F. Lamy, U. Röhl, Coherent high- and low-latitude control of the northwest African hydrological balance, *Nature Geoscience*, 1, 670–675, doi:10.1038/ngeo289.
1. **2005: Jahn, A.**, M. Claussen, A. Ganopolski, V. Brovkin, Quantifying the effect of vegetation dynamics on the climate of the Last Glacial Maximum, *Climate of the Past*, 1, 1–7, doi:10.5194/cp-1-1-2005.

### Under Review/Submitted

**Lenetsky, J.E.**<sup>1</sup>, **A. Jahn**, **P. Ugrinow**<sup>1</sup>, **C. Wyburn-Powell**<sup>1</sup>, **R. Patel**<sup>1</sup>, **H. Zanowski**<sup>1</sup>, Large future changes in the North Water Polynya are most likely if global warming exceeds 2°C, being revised for *Environmental Research Letters*.

**Wyburn-Powell, C.**<sup>1</sup> and **A. Jahn**, Large-Scale Climate Modes Drive Low-Frequency Regional Arctic Sea Ice Variability, under review at *J. of Climate*.

Gu, S. , Z. Liu, N. Zhao, T. Chen, J. Yu, J. Zhang, C. He, S. Chen, Z. Zhang, L. Li, **A. Jahn**, Reduced Atlantic abyssal ventilation inferred from radiocarbon records during the early deglaciation, submitted to *Nature Geoscience*.

Stevens, B., Adami, S., Ali, T., Anzt, H., Aslan, Z., Attinger, S., Bäck, J., Baehr, J., Bauer, P., Bernier, N., Bishop, B., Bockelmann, H., Bony, S., Bouchet, V., Brasseur, G., Bresch, D. N., Breyer, S., Brunet, G., Buttigieg, P. L., Cao, J., Castet, C., Cheng, Y., Dey Choudhury, A., Coen, D., Crewell, S., Dabholkar, A., Dai, Q., Doblas-Reyes, F., Durran, D., El Gaidi, A., Ewen, C., Exarchou, E., Eyring, V., Falkenhoff, F., Farrell, D., Forster, P. M., Frassoni, A., Frauen, C., Fuhrer, O., Gani, S., Gerber, E., Goldfarb, D., Grieger, J., Gruber, N., Hazeleger, W., Herken, R., Hewitt, C., Hoeffler, T., Hsu, H.-H., Jacob, D., **Jahn, A.**, Jakob, C., Jung, T., Kadow, C., Kang, I.-S., Kang, S., Kashinath, K., Kleinen-von Königslöw, K., Klocke, D., Kloenne, U., Klöwer, M., Kodama, C., Kollet, S., Kölling, T., Kontkanen, J., Kopp, S., Koran, M., Kulmala, M., Lappalainen, H., Latifi, F., Lawrence, B., Lee, J. Y., Lejeun, Q., Lessig, C., Li, C., Lippert, T., Luterbacher, J., Manninen, P., Marotzke, J., Matsouoka, S., Merchant, C., Messmer, P., Michel, G., Michielsen, K., Miyakawa, T., Müller, J., Munir, R., Narayanasetti, S., Ndiaye, O., Nobre, C., Oberg, A., Oki, R., Özkan-Haller, T., Palmer, T., Posey, S., Prein, A., Primus, O., Pritchard, M., Pullen, J., Putrasahan, D., Quaas, J., Raghavan, K., Ramaswamy, V., Rapp, M., Rauser, F., Reichstein, M., Revi, A., Saluja, S., Satoh, M., Schemann, V., Schemm, S., Schnadt Poberaj, C., Schulthess, T., Senior, C., Shukla, J., Singh, M., Slingo, J., Sobel, A., Solman, S., Spitzer, J., Stammer, D., Stier, P., Stocker, T., Strock, S., Su, H., Taalas, P., Taylor, J., Tegtmeier, S., Teutsch, G., Tompkins, A., Ulbrich, U., Vidale, P.-L., Wu, C.-M., Xu, H., Zaki, N., Zanna, L., Zhou, T., and Ziemann, F.: Earth Virtualization Engines (EVE), under review at *Earth Syst. Sci. Data Discuss*, preprint available at, <https://doi.org/10.5194/essd-2023-376>.

## PUBLISHED DATASETS AND CODE

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**2022: Smith, A.<sup>1</sup>, A. Jahn,** C. Burghard, D. Notz, Earliest snowmelt estimation dates for Arctic sea ice, Zenodo, doi:10.5281/zenodo.6559860.

**2021: Gu, S.<sup>2</sup>, Z. Liu, A. Jahn, H. Zanowski<sup>1</sup>:** CiTRACE. Version 1.0. UCAR/NCAR - DASH Repository. <https://doi.org/10.5065/hanq-bn92>.

**2021: Zanowski, H<sup>1</sup>, A. Jahn:** Arctic Ocean freshwater storage and fluxes from CMIP6 model ensembles 1950–2100. Arctic Data Center. doi:10.18739/A2154DQ22.

**2021: Zhong, Y<sup>1</sup>, A. Jahn,** G. H. Miller, A. Geirsdottir, Past2k: Transient simulation of the climate of the last 2000 years, [https://www.earthsystemgrid.org/dataset/ucar.cgd.cesm4.past2k\\_transient.html](https://www.earthsystemgrid.org/dataset/ucar.cgd.cesm4.past2k_transient.html).

**2020: Smith, A.<sup>1</sup>, A. Jahn,** Arctic sea ice seasonal transition metrics from coupled climate model simulations, 1979-2013, doi:10.18739/A2C53F235.

**2020: A. Jahn,** Arctic Ocean freshwater fluxes and storage from simulations with the Community Earth System Model version 1.1 (CESM1.1), doi:doi:10.18739/A2280504J.

**2018: Zhong, Y<sup>1</sup>, Jahn, A.,** G. H. Miller, A. Geirsdottir, Land use and volcanic forcing files for past2k CESM simulation, doi:10.5281/zenodo.1304427.

**2017: Pendleton, S., G.H. Miller, R.A. Anderson, S.E. Crump, Y. Zhong<sup>1</sup>, A. Jahn,** A. Geirsdóttir: Age determination and glacier model for a small ice cap on Baffin Island, doi:10.1594/PANGAEA.881156.

## BLOG POSTS AND OTHER NON-REFEREED PUBLICATIONS (WITH LINKS)

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**2023: B. Rabe, T. Martin, A. Solomon, K.M. Assmann, L.C. Biddle, T. Haine, T. Hattermann, F.A. Haumann, A. Jahn,** T. Karpouzoglou, G. Laukert, A. Naveira Garabato, E. Rosenblum, E. Sikes, L. Yin, X. Zhang, Polar Fresh Water in a Changing Global Climate: Linking Arctic and Southern Ocean Processes, Meeting Report, BAMS, doi:10.1175/BAMS-D-23-0046.1.

**2020: Holland, M.M., M. Bushuk, A. Jahn,** A. Roberts, Integrating Models and Observations to Better Predict a Changing Arctic Sea Ice Cover, *Arctic Report Card 2020*, R. L. Thoman, J. Richter-Menge, and M. L. Druckenmiller, Eds., doi:10.25923/bx13-ja71.

**2017: Corwin, L., Harvey, P., K., S., Graf, J., Ellingson, E., Bhattacharya, A., Birsoy, B., Casagrand, J., Emery, N., Fillmann, C., Foley, T., Guild, N., **Jahn, A.**, Lee, M., Pao, L., Power, J., Chasteen, S. (2017), Course-based Undergraduate Research Experiences: Advancing CU Boulder's Strategic Goals, CU Academic Futures white paper.**

- 2017:** **A. Jahn**, Die Zukunft des Arktischen Meereises, Invited expert guest post for the German Year of the Ocean.
- 2016:** **A. Jahn**, How predictable is the first ice-free Arctic summer? Guest Blogpost at CarbonBrief.
- 2012:** Massonnet, F., and **A. Jahn**, Observational needs for sea ice models: CliC white paper.
- 2010:** **Jahn, A.**, Modeling the variability of the liquid freshwater export from the Arctic Ocean, PhD thesis, 194 pages, McGill University, Canada.
- 2005:** **Jahn, A.**, Theories and Modeling of Glacial-Interglacial Cycles and Glacial Inception, Center for Climate and Global Change Research (C2GCR) Report No. 2005-1, 57 pages, McGill University, Montreal, Canada.
- 2004:** **Jahn, A.**, Atmosphere-Vegetation Feedback in the Climate System of the Last Glacial, Diplom thesis, 129 pages, Free University of Berlin, Germany.

## SCIENTIFIC PRESENTATIONS

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### Invited Scientific Presentations (44 presentations)

#### **Projections of a first versus consistently ice-free Arctic**

**08/2023:** Invited Talk in the IARPC Modelers Community of Practice Meeting, online

#### **Arctic sea ice loss - the impact of forced trends and variability**

**01/2023:** Invited Talk at the seminar series of the Meteorology Department at the Free University of Berlin, Berlin, Germany

#### **Die Arktis - auf dem Weg zu einem Sommer ohne Meereis**

**12/2022:** Invited public science lecture in German, translated title “The Arctic - on the way to a summer without sea ice”, Internationales Begegnungszentrum der Wissenschaft e.V. (IBZ), Berlin, Germany

#### **Predicting the path to a summer ice-free Arctic: Challenges and opportunities**

**11/2022:** Invited talk at the PIK RD4-Complexity Science Seminar Series, Potsdam, Germany

#### **Global linkages**

**09/2022:** Keynote talk in the workshop “Sources, Pathways and Impacts of freshwater in northern and southern Polar oceans and seas (SPICE UP)”, presenting on the global impact of Arctic freshwater

#### **Forced Changes in the Arctic Freshwater Budget Emerge in the Early 21st Century**

**05/2021:** Talk in the SMILE webinar series

#### **Quantifying the prediction uncertainty of an ice-free Arctic using large ensembles**

**10/2020:** Webinar talk at the CLIVAR Large Ensemble Working group sea ice mini-symposium

#### **Update on the Sea Ice Model Intercomparison project (SIMIP) for CMIP6**

**01/2021:** Short webinar talk at the IARPC webinar series of the Sea Ice and Modeling Teams.

**02/2019:** Webinar talk at the IARPC webinar series of the Sea Ice and Modeling Teams.

#### **Assessing the predictability and probability of a summer ice-free Arctic**

**02/2021:** Seminar in the Department of Meteorology and Atmospheric Sciences at Penn State, USA, virtual seminar

**11/2018:** Keynote before the ESSS Poster Conference hosted by the Atmospheric and Oceanic Sciences Department at CU Boulder, Boulder, USA.

**11/2018:** Seminar in the Atmospheric Science department seminar series at Colorado State University, Fort Collins, USA.

**10/2018:** Seminar in the INSTAAR seminar series at CU Boulder, Boulder, USA.

#### **Boundary forced predictability and the challenges of internal variability**

**08/2018:** Talk at the NSF-funded CESM Polar Modeling Workshop at NCAR, Boulder, USA.



## **Observed recent Arctic sea ice change, Arctic climate projections**

**05/2018:** Talks/lectures<sup>b</sup> at the International Polar Climate Summer School in Nanjing, China.

## **Assessing the prediction uncertainty of Arctic sea ice and ocean projections**

**05/2018:** Seminar at in the Global Modeling and Assimilation Office seminar series at NASA Goddard, Maryland, USA.

## **Simulated Arctic sea ice and ocean change**

**04/2018:** Keynote talk at the Arctic System Change workshop at NCAR, Boulder, USA.

## **Positive feedbacks from Arctic Ocean Sea Ice**

**11/2017:** Talk at the CU Center for the Study of Origins Symposium on “The Coldest Centuries in 8000 Years: The Little Ice Age Causes and Human Consequences.”, Boulder, USA.

## **Understanding and reducing errors in sea ice projections from global climate models**

**10/2017:** Keynote talk at the workshop on “Improved satellite retrievals of sea-ice concentration and sea-ice thickness for climate applications” in Hamburg, Germany.

## **Climate Modeling, Arctic sea ice projections, Sea ice Model Assessment**

**07/2017:** Talks/lectures<sup>b</sup> at the Connaught Summer Institute in Arctic Science: Atmosphere, Cryosphere, and Climate, Alliston, ON, Canada.

## **The Sea Ice Model Intercomparison project**

**06/2017:** Talk at the CLIVAR/CliC/SCAR Southern Ocean Regional Panel 12th session, Boulder, USA.

## **Isotope modeling**

**05/2017:** Talk at the Proxy System modeling and data assimilation in paleosciences workshop, Louvain-la-Neuve, Belgium.

## **Climate Science and Climate Projection**

**05/2017:** Talk at the CU Climate and Health workshop, Boulder, USA.

## **Impacts of Arctic freshwater on AMOC**

**03/2017:** Seminar in the Cryospheric and Polar Processes Seminar at NSIDC, Boulder, USA.

## **Influence of internal variability on Arctic sea ice simulations**

**02/2017:** Talk at the Santa Fe Climate Conference, NM, USA.

## **Challenges for assessing sea ice simulations from climate models against observations**

**01/2017:** Talk at the 2017 AMS meeting in Seattle, WA, USA.

## **Isotope modeling with the CESM**

**08/2016:** Talk at the 2016 CESM tutorial at NCAR, Boulder, USA.

## **Using large ensemble simulations to assess Arctic sea ice simulations and predictability**

**06/2016:** Talk in the Large Ensemble session at the 2016 CESM workshop, Breckenridge, USA.

## **How predictable is the timing of a summer ice-free Arctic?**

**05/2016:** Talk at the SEARCH SSC meeting in Boulder, USA.

**04/2016:** Seminar at the Institute for Meteorology at the Free University of Berlin, Germany.

## **Internal variability limits the predictability of a summer ice-free Arctic**

**12/2014:** Talk at the fall AGU meeting in San Francisco, USA.

## **Using models to study Arctic climate variability and change**

**01/2014:** Seminar at the Institute for Arctic and Alpine research (INSTAAR) in Boulder, USA.

## **Carbon isotopes in the CESM**

**08/2013:** Talk at the “Isotopes of Carbon, Water, and Geotracers in Paleoclimate Research” conference in Bern, Switzerland.

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<sup>b</sup>Also listed under other teaching

## Large Scale Modeling Data Needs

**06/2013:** Plenary talk at the CliC Sea ice Modeling & Observing workshop in Tromso, Norway.

## Global Impacts of Arctic sea-ice changes

**04/2012:** Talk at the International Polar year (IPY) conference in Montreal, Canada.

## Assessing future changes in the Arctic Ocean

**04/2012:** Seminar in the Dept. of Atmospheric & Oceanic Sciences, McGill University, Canada.

**01/2012:** Seminar at the Alfred Wegener Institute for Polar & Marine Science (AWI), Germany.

**09/2011:** Seminar in the Dept. of Physics & Astronomy at Howard University, Washington DC, USA.

## The Polar Regions: An area of active research for decades to come

**06/2011:** Talk at the IUGG conference in Melbourne, Australia.

## Variability and change in the Arctic Ocean

**04/2011:** Seminar at Woods Hole Oceanographic Institution, USA.

**03/2011:** Seminar in the Dept of Environment and Geography, University of Manitoba, Canada.

## A tracer study of the Arctic Ocean's liquid freshwater export variability

**09/2010:** Seminar in the CGD seminar series at NCAR, Boulder, USA.

**06/2010:** Seminar at the Alfred Wegener Institute for Polar & Marine Science (AWI), Germany.

**06/2010:** Talk at the CMOS conference in Ottawa, Canada.

## Contributed Scientific Presentations

(presenting author other than the first author indicated by \*.)

Presentations where neither Jahn nor her direct advisees were presenting or first author are not included

<sup>1</sup> = Jahn as primary advisor for student or postdoc

<sup>2</sup> = Jahn as secondary advisor/mentor for student or postdoc

## Little Consensus Across Climate Models of the Influence of Climate Modes of Variability on the Timing of an Ice-Free Arctic

**12/2023:** C. Wyburn-Powell<sup>1</sup>, A. Jahn, Oral presentation at the 2023 fall AGU meeting, San Francisco, USA.

## Arctic Sea Ice Extent Trend Prediction Accuracy Can Be Increased by Ensemble Member Selection

**12/2023:** W. Pauly<sup>1c</sup>, N. Gaither<sup>1c</sup>, E. Leahy<sup>1c</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Poster presentation at the 17th Annual Earth System and Space Science Poster Conference, Boulder, USA. *Won best sea ice poster award.*

## Decades of positive Arctic sea ice extent trends cannot be explained by common modes of climate variability

**12/2023:** A. Ripley<sup>c1</sup>, E. Schattinger<sup>c1</sup>, R. Chatwin<sup>c1</sup>, Z. Pekarek<sup>c1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Poster presentation at the 17th Annual Earth System and Space Science Poster Conference, Boulder, USA. *Tied for best undergraduate poster award.*

## Periods of no trends in Arctic sea ice area cannot be explained by common modes of variability

**12/2023:** L. Christenson<sup>c1</sup>, A. Luger<sup>c1</sup>, N. Myers<sup>c1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Poster presentation at the 17th Annual Earth System and Space Science Poster Conference, Boulder, USA. *Tied for best undergraduate poster award.*

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<sup>c</sup>Indicates joint first authorship with equal contributions

## **Extremely negative Arctic sea ice area trends generally align with positive global sea surface temperature trends**

**12/2023:** M. Rollin<sup>c1</sup>, S. Alshahrani<sup>c1</sup>, B. Demaniow<sup>c1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Poster presentation at the 17th Annual Earth System and Space Science Poster Conference, Boulder, USA.

## **Projections of a summer ice-free Arctic**

**06/2023:** A. Jahn, M.M. Holland, J.E. Kay, Poster at the 2023 IGS Sea Ice Symposium, Bremerhaven, Germany.

## **Fundamental changes in the North Water Polynya (NOW) are less likely if global warming is limited to 2 °C**

**06/2023:** J. Lenetsky<sup>1</sup>, A. Jahn\*, P. Ugrinow<sup>1</sup>, C. Wyburn-Powell<sup>1</sup>, R. Patel<sup>1</sup>, H. Zanowski<sup>1</sup>, Poster at the 2023 IGS Sea Ice Symposium, Bremerhaven, Germany.

**05/2023:** J. Lenetsky<sup>1</sup>, A. Jahn\*, P. Ugrinow<sup>1</sup>, C. Wyburn-Powell<sup>1</sup>, R. Patel<sup>1</sup>, H. Zanowski<sup>1</sup>, Poster at the 2023 Arctic-Subarctic Ocean Fluxes meeting, Las Palmas de Gran Canaria, Spain.

## **Large-Scale Climate Modes as Drivers of Low-Frequency Regional Arctic Sea Ice Variability**

**06/2023:** C. Wyburn-Powell<sup>1</sup> and A. Jahn, Talk at the 2023 International Glaciology Society International Symposium on Sea Ice, Bremerhaven, Germany.

**02/2023:** C. Wyburn-Powell<sup>1</sup> and A. Jahn, Talk at the CESM Polar Climate Working Group Winter Meeting, Boulder, Colorado, USA.

## **An updated observational record of Davis Strait temperature and salinity, 2004-2017**

**05/2023:** J.E. Lenetsky<sup>1</sup>, C.M. Lee, C. Richards, K. Drushka, A. Jahn, Oral presentation at Arctic Sub-Arctic Ocean Fluxes (ASOF) Meeting, Las Palmas de Gran Canaria, Spain.

**04/2023:** J.E. Lenetsky<sup>1</sup>, C.M. Lee, C. Richards, K. Drushka, A. Jahn, Virtual poster presentation at European Geophysical Union (EGU) Meeting.

## **Using Machine Learning to Explain Low-Frequency Drivers of Arctic Sea Ice Variability**

**01/2023:** C. Wyburn-Powell<sup>1</sup> and A. Jahn, Poster at the 22nd Conference on Artificial Intelligence for Environmental Science, Denver, Colorado.

## **Low-Frequency Drivers of Arctic Sea Ice Variability**

**12/2022:** C. Wyburn-Powell<sup>1</sup> and A. Jahn, Poster at the University of Colorado 16th Annual Earth System and Space Science Poster Conference, University of Colorado, Boulder, Colorado.

## **Arctic sea ice loss – the canary in the coalmine of climate change**

**11/2022:** A. Jahn, Talk at the Research Symposium of the Internationales Begegnungszentrum der Wissenschaft e.V. Berlin, Germany.

## **Identifying Drivers of Sea Ice Internal Variability Using Novel Data-Driven Methods**

**11/2022:** A. Jahn, Poster and Talk at the Alexander von Humboldt Network Meeting, Frankfurt am Main, Germany.

## **Challenges and opportunities in Arctic sea ice research**

**09/2022:** A. Jahn, Talk at the Symposium on Causal Inference, Lychen, Germany.

## **Reducing Arctic Sea Ice Internal Variability Uncertainty on Multiple Timescales**

**08/2022:** Wyburn-Powell, C.<sup>1</sup>, A. Jahn, Poster at the 17th Conference on Polar Meteorology and Oceanography, Madison, WI, USA.

## **Understanding Davis Strait freshwater flux variability using observations and models**

**08/2022:** Lenetsky, J.<sup>1</sup>, A. Jahn, P. Myers, C. Lee, Talk at the 17th Conference on Polar Meteorology and Oceanography, Madison, WI, USA.

**05/2022:** Lenetsky, J.<sup>1</sup>, A. Jahn, P. Myers, C. Lee, Talk at the Arctic Sub-Arctic Ocean Fluxes (ASOF) Meeting, Hafnarfjördur, Iceland.

- 03/2022: Lenetsky, J.<sup>1</sup>, A. Jahn, P. Myers, C. Lee, Talk at the CESM Winter Polar Climate Working Group Meeting, online.**
- 02/2022: Lenetsky, J.<sup>1</sup>, A. Jahn, P. Myers, C. Lee, Oral presentation at the virtual 2022 Ocean Sciences Meeting.**
- 12/2021: Lenetsky, J.<sup>1</sup>, A. Jahn, P. Myers, C. Lee, Poster at 15th Annual Earth System and Space Science Poster Conference, Boulder, USA.**
- 12/2021: Lenetsky, J.<sup>1</sup>, A. Jahn, P. Myers, C. Lee, Poster at 15th Annual Earth System and Space Science Poster Conference, Boulder, USA.**

#### **A closer look at Arctic sea ice Rapid Ice Loss Events (RILEs)**

- 06/2022: Quint, D.<sup>1</sup>, A. Jahn, Poster presentation at the virtual 27th Annual CESM Workshop.**

#### **Changes in the properties of the North Water Polynya in a warmer climate**

- 06/2022: P. Ugrinow<sup>1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, R. Patel<sup>1</sup>, Oral Presentation at the virtual 27th Annual CESM Workshop.**

#### **North Water Polynya Sensitivity to Arctic Warming**

- 05/2022: Patel, R.<sup>1</sup>, P. Ugrinow<sup>1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Online oral presentation (EGU22-8941) at the 2022 EGU meeting.**

#### **Simulating Pikialasorsuaq (the North Water Polynya)**

- 03/2022: Jahn, A., P. Ugrinow<sup>1</sup>, R. Patel<sup>1</sup>, C. Wyburn-Powell<sup>1</sup>, H. Zanowski<sup>1</sup>, I. Martinez<sup>2</sup>, P. DeRepentigny<sup>1</sup>, J. Lenetsky<sup>1</sup>, Talk at the virtual 2022 Ocean Science Meeting.**

#### **Understanding Simulated and Observed Internal Variability in Arctic Sea Ice**

- 03/2022: Wyburn-Powell, C.<sup>1</sup>, A. Jahn, M. England, Talk at the virtual 2022 Ocean Sciences Meeting**

#### **The fraction of Pacific Ocean circulation change captured by $\Delta^{14}C$ varies during the deglaciation in an isotope-enabled ocean model**

- 03/2022: Zanowski, H.<sup>1</sup>, A. Jahn, S. Gu, Z. Liu, T. Marchitto, Talk at the virtual Ocean Science Meeting.**

#### **Lessons learned from a first iteration of a newly developed CURE class on Arctic sea ice**

- 02/2022: Jahn, A., A.-B. Hunter, T. Weston, C. Wyburn-Powell<sup>1</sup>, Talk at the virtual 2022 Ocean Science Meeting.**

#### **Modeled Internal Variability of Arctic Sea Ice Cover within Observational Uncertainty**

- 12/2021: Wyburn-Powell, C.<sup>1</sup>, A. Jahn, M. England, Poster at 15th Annual Earth System and Space Science Poster Conference, Boulder, USA.**

#### **Global warming greater than 2.5 °C forces the North Water Polynya to peak earlier and disappear sooner**

- 12/2021: Patel, R.<sup>c1</sup>, P. Ugrinow<sup>c1</sup>, C. Wyburn-Powell<sup>1</sup>, A. Jahn, Poster at 15th Annual Earth System and Space Science Poster Conference, Boulder, USA.**

#### **Rapid Ice Loss is most likely to occur mid-summer to fall but is possible in all months**

- 12/2021: Ortiz, M.<sup>c1</sup>, E. Shivers<sup>c1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Poster at 15th Annual Earth System and Space Science Poster Conference, Boulder, USA.**

#### **Predictions of an ice-free Arctic are likely limited to a lead-time of 2-7 years**

- 12/2021: Farmer, N.<sup>c1</sup>, D. Quint<sup>c1</sup>, H. Warlock<sup>c1</sup>, A. Jahn, C. Wyburn-Powell<sup>1</sup>, Poster at 15th Annual Earth System and Space Science Poster Conference, Boulder, USA.**

#### **The North Water Polynya Change over time**

- 07/2021: Martinez, I.<sup>2</sup>, P. DeRepentigny<sup>1</sup>, J.M. Moriarty, A. Jahn, H. Zanowski<sup>1</sup>, Poster at Virtual Joint Summer Internship Poster Session, Boulder, USA**



### **Improving model-satellite comparisons of sea ice melt onset with a satellite simulator**

**06/2021: Smith, A.**<sup>1</sup>, **A. Jahn**, C. Burgard, D. Notz, Talk at the 26th Annual CESM Workshop, online

### **Arctic freshwater in CMIP6: Declining sea ice, increasing ocean storage and export**

**04/2021: Zanowski, H**<sup>1</sup>, **A. Jahn**, M.M. Holland, Talk at the Virtual European Geophysical Union General Assembly

**03/2021: Zanowski, H**<sup>1</sup>, **A. Jahn**, M.M. Holland, Invited talk at the IARPC Physical Oceanography Self-Formed Team and Sea Ice Collaboration Team joint webinar

### **Meltwater Impacts AMOC Evolution During the Last Deglaciation**

**03/2021: Reinelt, S.**<sup>2</sup>, H. Zanowski<sup>1</sup>, **A. Jahn**, Lightning talk at the 14th Annual Earth System and Space Science “Poster” Conference, online

### **Pacific Ocean <sup>14</sup>C evolution during the deglaciation in C-iTRACE**

**02/2021: Zanowski, H**<sup>1</sup>, **A. Jahn**, S. Gu, Z. Liu, T. Marchitto, Talk at the virtual winter CESM Paleoclimate Working Group Meeting

### **Seasonal transition dates can reveal biases in Arctic sea ice simulations**

**01/2021: Smith, A.**<sup>1</sup>, **A. Jahn**, M. Wang, Invited talk in the IARPC Sea Ice Subteam webinar series

### **Impact of CMIP6 Biomass Burning Emissions on Arctic Sea Ice Loss**

**06/2021: DeRepentigny, P**<sup>1</sup>, **A. Jahn**, M.M. Holland, J. Fasullo, J.-F. Lamarque, C. Hannay, M.J. Mills, D.A. Bailey, S. Tilmes, A.M. Barrett, Invited talk at the 26th Annual CESM Workshop, online

**06/2021: DeRepentigny, P**<sup>1</sup>, **A. Jahn**, M.M. Holland, J. Fasullo, J.-F. Lamarque, C. Hannay, M.J. Mills, D.A. Bailey, S. Tilmes, A.M. Barrett, Talk at the American Meteorological Society 16th Conference on Polar Meteorology and Oceanography, online. *Awarded 1st Place Outstanding Student Oral Presentation*

**04/2021: DeRepentigny, P**<sup>1</sup>, **A. Jahn**, M.M. Holland, J. Fasullo, J.-F. Lamarque, C. Hannay, M.J. Mills, D.A. Bailey, S. Tilmes, A.M. Barrett, Talk at the Virtual European Geophysical Union General Assembly

**02/2021: DeRepentigny, P**<sup>1</sup>, **A. Jahn**, M.M. Holland, J. Fasullo, J.-F. Lamarque, C. Hannay, M.J. Mills, D.A. Bailey, S. Tilmes, A.M. Barrett, Talk at the winter CESM Polar Climate Working Group Virtual Meeting

### **Realism of simulated internal variability in Arctic sea ice**

**06/2021: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Talk at the 26th Annual CESM Workshop, online

**06/2021: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Talk at the American Meteorological Society 16th Conference on Polar Meteorology and Oceanography, online. *Awarded 2nd Place Outstanding Student Oral Presentation.*

**04/2021: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Talk at the Virtual European Geophysical Union General Assembly

**03/2021: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Lightning talk at the 14th Annual Earth System and Space Science “Poster” Conference, online

**02/2021: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Talk at the CESM Polar Climate Working Group Meeting, online

**12/2020: Wyburn-Powell, C.**<sup>1</sup>, **A. Jahn**, M. England, Poster at the virtual AGU 2020 conference

### **Is There a Forced Signal in the Recent Reduced Rate of Arctic Sea Ice Loss?**

**12/2020: DeRepentigny, P**<sup>1</sup>, **A. Jahn**, M. Holland, M. Mills, S. Tilmes, J. Fasullo, Talk at the virtual AGU 2020 conference

### **Global Intermediate Water Evolution during the Last Deglaciation in C-iTRACE**

**12/2020: Zanowski, H.<sup>1</sup>, A. Jahn, S. Gu, Z. Liu, T. Marchitto**, Poster at the virtual AGU 2020 conference

#### **Forced Changes in the Arctic Freshwater Budget Emerge in the Early 21st Century**

**10/2021: A. Jahn, R. Laiho<sup>1</sup>**, Talk at the virtual ASOF (Arctic-Subarctic Ocean Fluxes) 2021 workshop

**04/2021: A. Jahn, R. Laiho<sup>1</sup>**, Talk at the virtual EGU2021 meeting.

**12/2020: A. Jahn, R. Laiho<sup>1</sup>**, Talk at the virtual fall 2020 AGU meeting.

**06/2020: A. Jahn, R. Laiho<sup>1</sup>**, Lightning talk at the PCWG summer virtual 2020 CESM workshop.

#### **Detecting Arctic sea ice melt onset with a satellite simulator**

**06/2020: A. Smith<sup>1</sup>, A. Jahn, C. Burgard**, Lightning talk at the PCWG summer virtual 2020 CESM workshop.

#### **Arctic Freshwater Storage and Export in CMIP6 models**

**10/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Talk in the virtual fall 2020 ATOC colloquium series.

**09/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Invited virtual seminar at the National Center for Atmospheric Research.

**09/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Invited virtual seminar at the Institute of Arctic and Alpine Research, Univ. of Colorado Boulder.

**09/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Invited virtual seminar at the British Antarctic Survey.

**09/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Invited virtual seminar at the University of Rhode Island.

**06/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Talk at the virtual summer PCWG 2020 CESM workshop.

**02/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Poster at the 2020 Ocean Sciences meeting, San Diego, USA

#### **Arctic Freshwater Storage and Export in CESM2-CAM6 and CESM2-WACCM6**

**02/2020: H. Zanowski<sup>1</sup>, A. Jahn, M. Holland**, Talk at the Winter PCWG meeting, Boulder, USA

#### **Seasonal transitions of Arctic sea ice over the satellite era in CMIP6 models**

**05/2020: A. Smith<sup>1</sup>, A. Jahn, M. Wang**, [Virtual Display](#) at the virtual EGU 2020 meeting.

**02/2020: A. Smith<sup>1</sup>, A. Jahn, M. Wang**, Talk at the Winter PCWG meeting, Boulder, USA

**12/2019: A. Smith<sup>1</sup>, A. Jahn, M. Wang**, Poster at the the 13th Annual Earth System and Space Science Poster Conference, Boulder, USA

#### **Changes in Arctic sea ice in the CESM2 over the 20th and 21st centuries**

**05/2020: P. DeRepentigny<sup>1</sup>, A. Jahn, M. Holland, A. Smith<sup>1</sup>**, [Virtual Display](#) at the virtual EGU 2020 meeting.

**02/2020: P. DeRepentigny<sup>1</sup>, A. Jahn, M. Holland, A. Smith<sup>1</sup>**, Talk at the Winter PCWG meeting, Boulder, USA

**12/2019: P. DeRepentigny<sup>1</sup>, A. Jahn, M. Holland, A. Smith<sup>1</sup>**, Poster at the the 13th Annual Earth System and Space Science Poster Conference, Boulder, USA

**09/2019: P. DeRepentigny<sup>1</sup>, A. Jahn, M. Holland, A. Smith<sup>1</sup>**, Poster at the ESM Summer School 2019, Bad Aibling, Germany.

**08/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, Poster at the IGS Sea ice Symposium: Sea Ice at the Interface, Winnipeg, Canada.

**08/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, Talk at the 2019 SIMIP Workshop, Winnipeg, Canada.

#### **No Scenario Impact on Arctic September Sea Ice in CESM2**

**09/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, Poster at the ESM Summer School 2019, Bad Aibling, Germany.

**08/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, Poster at the 2019 CESM Polar Modeling Workshop, Boulder, USA.

#### **Increased Transnational Sea Ice Transport Between Neighboring Arctic States in the 21<sup>st</sup> Century**

**08/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, B. Tremblay, R. Newton, S. Pfirmann, Talk at the IGS Sea ice Symposium: Sea Ice at the Interface, Winnipeg, Canada. *Awarded honorable mention for student presentation*

**07/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, B. Tremblay, R. Newton, S. Pfirmann, Talk at the 27th IUGG conference, Montreal, Canada.

#### **Identifying drivers of Arctic sea ice internal variability**

**08/2019: A. Jahn**, Talk at the IGS Sea ice Symposium: Sea Ice at the Interface, Winnipeg, Canada.

**07/2019: A. Jahn**, Talk at the 27th IUGG conference, Montreal, Canada.

**05/2019: A. Jahn**, Talk at the 15th AMS Conference on Polar Meteorology and Oceanography, Boulder, USA.

#### **Processes Driving the Arctic Sea Ice Open Water Period**

**08/2019: A. Smith<sup>1</sup>, A. Jahn**, M. Wang, Talk at the IGS Sea ice Symposium: Sea Ice at the Interface, Winnipeg, Canada.

**05/2019: A. Smith<sup>1</sup>, A. Jahn**, M. Wang, Talk at the 15th AMS Conference on Polar Meteorology and Oceanography, Boulder, USA. *Won most outstanding student presentation award.*

#### **Predictability and probability of a summer ice-free Arctic**

**07/2019: A. Jahn**, Poster at the Large Ensembles Workshop, Boulder, USA.

#### **Non-uniform contribution of internal variability to recent Arctic sea ice loss**

**05/2019: M. England<sup>2</sup>, A. Jahn\*, L. Polvani, 15th AMS Conference on Polar Meteorology and Oceanography, Boulder, USA**

**02/2019: M. England<sup>2</sup>, A. Jahn\*, L. Polvani, CESM PCWG winter meeting, Boulder, USA.**

#### **Future Sea-Ice Decline Predicted to Bring the Arctic Nations Closer Together**

**05/2019: P. DeRepentigny<sup>1</sup>, A. Jahn**, B. Tremblay, R. Newton, S. Pfirmann, Talk at the 15th AMS Conference on Polar Meteorology and Oceanography, Boulder, USA. *Won outstanding student presentation award.*

**02/2019: P. DeRepentigny<sup>1</sup>**, B. Tremblay, R. Newton, S. Pfirmann, **A. Jahn**, Talk at the 2019 CESM PCWG meeting, Boulder, USA.

**12/2018: P. DeRepentigny<sup>1</sup>**, B. Tremblay, R. Newton, S. Pfirmann, **A. Jahn**, Poster at the 2018 AGU conference, Washington DC, USA.

**11/2018: P. DeRepentigny<sup>1</sup>**, B. Tremblay, R. Newton, S. Pfirmann, **A. Jahn**, Poster at the ESSS Poster Conference at CU Boulder, Boulder, USA. *Won best overall poster award*

#### **Arctic freshwater modeling work at CU Boulder**

**08/2018: A. Jahn**, **R. Laiho<sup>1</sup>**, **P. DeRepentigny<sup>1</sup>**, Oral talk at the Arctic Freshwater Dynamics Workshop at Lamont-Doherty, New York, USA.

#### **Arctic Sea Ice Melt Season Length in the CESM Large Ensemble**

**11/2018: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the ESSS Poster Conference at CU Boulder, Boulder, USA. *Won the poster award in the Snow and Ice category*

**06/2018: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the POLAR2018 meeting, Davos, Switzerland

#### **Scenario Uncertainty for Arctic Freshwater Projections**

**06/2018: R. Laiho<sup>1</sup>, A. Jahn**, Poster at the 23rd CESM workshop, Boulder, USA

### **Reduced probability of Arctic ice-free summers for 1.5 °C compared to 2 °C warming**

04/2019: **A. Jahn**, Poster at the EGU 2019 meeting, Vienna, Austria

04/2018: **A. Jahn**, Poster at the Arctic System Change workshop at NCAR, Boulder, USA.

### **For Arctic summer sea ice, staying at 1.5 °C global warming matters**

06/2018: **A. Jahn**, Talk at the POLAR2018 meeting, Davos, Switzerland

01/2018: **A. Jahn**, Talk at the PCWG meeting, Boulder, USA

### **Assessing the impact of internal variability on comparisons of sea ice thickness with satellite derived products**

08/2019: **A. Jahn**, **K. Dochen**<sup>1</sup>, D. Hall, Poster at the IGS Sea ice Symposium: Sea Ice at the Interface, Winnipeg, Canada

06/2018: **A. Jahn**, **K. Dochen**<sup>1</sup>, D. Hall, Talk at the POLAR2018 meeting, Davos, Switzerland

12/2017: **A. Jahn**, **K. Dochen**<sup>1</sup>, D. Hall, Talk at the AGU fall meeting, New Orleans, USA

### **Will future sea-ice decline bring the Arctic Nations closer together?**

06/2018: **P. DeRepentigny**<sup>1</sup>, B. Tremblay, R. Newton, S. Pfirmann, **A. Jahn**, Poster at the 23rd CESM workshop, Boulder, USA

12/2017: **P. DeRepentigny**<sup>1</sup>, B. Tremblay, R. Newton, S. Pfirmann, **A. Jahn**, Poster at the 11th Annual Earth System and Space Science Poster Conference, Boulder, USA

### **Detecting Changes in the Arctic Freshwater Budget**

06/2018: **R. Laiho**<sup>1</sup>, **A. Jahn**<sup>\*</sup>, Poster at the POLAR2018 conference, Davos, Switzerland

04/2018: **R. Laiho**<sup>1</sup>, **A. Jahn**, Poster at the 48th International Arctic Workshop, Boulder, USA

12/2017: **R. Laiho**<sup>1</sup>, **A. Jahn**, Poster at the 11th Annual Earth System and Space Science Poster Conference, Boulder, USA

06/2017: **R. Laiho**<sup>1</sup>, **A. Jahn**, Poster at the 22nd CESM Workshop, Boulder, USA

02/2017: **R. Laiho**<sup>1</sup>, **A. Jahn**, Talk at the 2017 winter CESM PCWG Meeting, Boulder, USA

### **What Models and Satellites Tell Us (and Don't Tell Us) About Arctic Sea Ice Melt Season Length**

12/2017: **A. Ahlert**<sup>1</sup>, **A. Jahn**, Talk at the AGU fall meeting, New Orleans, USA

### **Modeling North Atlantic Sea Ice and Circulation Changes during the Last 2ka**

10/2017: **Y. Zhong**<sup>1</sup>, G. Miller, **A. Jahn**, A. Geirsdottir, Talk at the ANATILS meeting, Boulder, USA

### **How the Timing of Melt and Freeze Onset Impacts Arctic Sea Ice Cover**

12/2017: **A. Ahlert**<sup>1</sup>, **A. Jahn**, Poster at the 11th Annual Earth System & Space Science Poster Conference, Boulder, USA

08/2017: **A. Ahlert**<sup>1</sup>, **A. Jahn**, Poster at the International Glaciological Society "Polar Ice, Polar Climate, Polar Change" Conference, Boulder, USA

### **A summer ice-free Arctic by the end of the 21st century? A question of future emissions**

08/2017: **A. Jahn**, Talk at the International Glaciological Society meeting "Polar Ice, Polar Climate, Polar Change" in Boulder, USA

### **Assessing ocean circulation changes at the LGM using radiocarbon simulations with the iCESM**

06/2017: **A. Schroeder**<sup>1</sup>, **A. Jahn**, Poster at the CESM workshop, Boulder, USA

05/2017: **A. Schroeder**<sup>1</sup>, **A. Jahn**, Poster at the Proxy System modeling and data assimilation in paleosciences workshop, Louvain-la-Neuve, Belgium



### **Definitions Matter: Arctic Sea Ice Melt and Freeze Onset**

**06/2017: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the summer CESM workshop, Boulder, USA

**03/2017: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the Polar Prediction Workshop, Bremerhaven, Germany

**02/2017: A. Ahlert<sup>1</sup>, A. Jahn**, Talk at the winter PCWG CESM workshop, Boulder, USA

### **Predictability of Arctic sea ice under different emission scenarios**

**03/2017: A. Jahn**, Talk at the Polar Prediction workshop, Bremerhaven, Germany

### **A Past2K run with CESM**

**03/2017: Y. Zhong<sup>1</sup>, G. Miller, A. Jahn, A. Geirsdottir**, Talk at the CESM Paleoclimate WG meeting, Boulder, USA

### **Assessing sea ice melt season characteristics in the CESM Large Ensemble**

**12/2016: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the 2016 Earth & Space Science Student Poster conference, Boulder, USA.

**11/2016: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the FAMOS workshop, Woods Hole, USA.

**06/2016: A. Ahlert<sup>1</sup>, A. Jahn**, Poster at the 21st CESM Workshop, Breckenridge, USA.

### **The Journey to a New ATOC Major: What do we want our students to learn?**

**10/2016: Nigro, M.A., D. Brown, A. Jahn\*, N. Lovenduski, J.K. Lundquist**, Poster at the 2016 TRESTLE Annual Meeting, Boulder, USA.

### **Internal variability in the Arctic freshwater budget as simulated by the CESM Large Ensemble**

**02/2018: R. Laiho<sup>1</sup>, A. Jahn**, Talk at the 2018 Ocean Sciences meeting, Portland, USA

**11/2016: R. Laiho<sup>1</sup>, A. Jahn**, Poster at the FAMOS workshop, Woods Hole, USA

**06/2016: R. Laiho<sup>1</sup>, A. Jahn**, Poster at the 21st CESM workshop, Breckenridge, USA

### **Studies of the AMOC strength in future and paleo simulations with the CESM**

**05/2016: A. Jahn, M. Holland, B. Otto-Bliesner**, Poster at the Workshop on Connecting Paleo and Modern Oceanographic Data to Understand AMOC over Decades to Centuries, Boulder, USA

### **How predictable is the timing of a summer ice-free Arctic?**

**11/2016: A. Jahn, J. Kay, M. Holland, D. Hall**, Poster at the FAMOS workshop, Woods Hole, USA

**04/2016: A. Jahn, J. Kay, M. Holland, D. Hall**, Talk at the EGU meeting in Vienna, Austria

### **Sea ice simulations for the Last Millennium - the role of internal versus forced variability**

**06/2016: A. Jahn**, Poster at the 21st CESM workshop, Breckenridge, USA

**04/2016: A. Jahn**, Poster at the EGU meeting, Vienna, Austria

### **Influence of internal variability on sea ice predictability**

**02/2016: A. Jahn, J. Kay, M. Holland, D. Hall**, Talk at the CESM PCWG winter meeting, Boulder, USA

**12/2015: A. Jahn, J. Kay, M. Holland, D. Hall**, Poster at the AGU fall meeting, San Francisco, USA

### **Investigating the mechanisms leading to synchronous snowline depression throughout the northern North Atlantic during the Late Holocene using the CESM**

**10/2015: A. Jahn**, Talk at the ANATILS (Abrupt North Atlantic Transitions: Ice, Lakes, Sea) workshop, Boulder, USA

### **The Sea ice model intercomparison project for CMIP6**

**02/2015: A. Jahn**, Talk at the CliC SSG meeting, Boulder, USA

**02/2015: A. Jahn**, Talk at the CESM Polar Climate WG meeting, Boulder, USA.

### **Uncertainty in predictions of Arctic sea ice**

**09/2014:** A. Jahn, M. Holland, J. Kay, Poster at the Royal Society meeting, Buckinghamshire, UK.

**06/2014:** A. Jahn, M. Holland, J. Kay, Poster at the CESM meeting, Breckenridge, USA.

### **Simulated carbon isotope distributions in the ocean model of the CESM**

**09/2014:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation in the CGD Research Reports seminar series at NCAR, USA.

**06/2014:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the CESM workshop, Breckenridge, USA.

**05/2014:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the 2nd PMIP3 meeting, Namur, Belgium.

### **Arctic sea ice in the CESM large ensemble**

**01/2014:** A. Jahn, M. Holland, J. Kay, Oral presentation at the Polar Climate WG winter meeting, Boulder, USA.

### **The isotope enabled CESM**

**05/2014:** A. Jahn, Keith Lindsay, Esther Brady, Synte Peacock, Jiaxu Zhang, Bette Otto-Bliesner, Zhengyu Liu, Poster at the 2nd PMIP3 meeting, Namur, Belgium.

**10/2012:** A. Jahn, Keith Lindsay, Esther Brady, Synte Peacock, Jiaxu Zhang, Bette Otto-Bliesner, Zhengyu Liu, Oral presentation at the AOMIP/FAMOS workshop, Woods Hole, USA.

### **Implications of Arctic sea ice changes for North Atlantic deep convection and the MOC**

**02/2013:** A. Jahn, M. Holland, Oral presentation at the CESM Polar Climate WG meeting, Boulder, USA.

### **Carbon isotopes in the iCESM**

**12/2014:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Poster at the 2014 fall AGU meeting, San Francisco, USA.

**03/2014:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the 2014 spring Paleo WG meeting, Boulder, USA.

**02/2014:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Poster at the 2014 Ocean Sciences meeting, Honolulu, USA.

**08/2013:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the 2013 CESM tutorial, Boulder, USA.

**06/2013:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the CESM Paleo Climate WG meeting, Breckenridge, USA.

**01/2013:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the CESM Ocean Modeling WG meeting, Boulder, USA.

**11/2012:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation at the SynTraCe workshop, Providence, USA.

**10/2012:** A. Jahn, Keith Lindsay, Esther Brady, Bette Otto-Bliesner, Zhengyu Liu, Nicolas Gruber, Xavier Giraud, Oral presentation in the CGD Research Reports at NCAR, Boulder, USA.

### **21st century Arctic September sea-ice extent: concentration, trends, and variability**

**04/2012:** A. Jahn, M. Holland, J. Kay, Poster at the IPY conference, Montreal, Canada.

### **Data needs for sea ice models**

**02/2013:** A. Jahn, Oral presentation at the CliC Steering Committee Meeting, Potsdam, Germany.

**11/2011:** A. Jahn, Oral presentation at the CliC sea ice workshop, Boulder, USA.

### **How robust are model results of the seasonal cycle of Arctic freshwater export?**

**11/2011:** A. Jahn, Oral presentation at the AOMIP workshop, Woods Hole, USA.

### **Late 20th century simulation of Arctic sea-ice and ocean properties in the CCSM4**

- 10/2011: A. Jahn**, K. Sterling, M. M. Holland, J. E. Kay, J. A. Maslanik, C. M. Bitz, D. A. Bailey, J. Stroeve, E. C. Hunke, W. H. Lipscomb, Poster at the WCRP climate conference, Denver, USA,.
- 06/2011: A. Jahn**, K. Sterling, M. M. Holland, J. E. Kay, J. A. Maslanik, C. M. Bitz, D. A. Bailey, J. Stroeve, E. C. Hunke, W. H. Lipscomb, Oral presentation at the IUGG conference, Melbourne, Australia.
- 03/2011: A. Jahn**, K. Sterling, M. M. Holland, J. E. Kay, J. A. Maslanik, C. M. Bitz, D. A. Bailey, J. Stroeve, E. C. Hunke, W. H. Lipscomb, Poster at the Gordon Polar Marine Sciences Conference, Ventura, USA.
- 02/2011: A. Jahn**, K. Sterling, M. M. Holland, J. E. Kay, J. A. Maslanik, C. M. Bitz, D. A. Bailey, J. Stroeve, E. C. Hunke, W. H. Lipscomb, Oral presentation at the CCSM Polar Climate WG meeting, Boulder, USA.

#### **Seasonal cycle of the Fram Strait freshwater export: A model perspective**

- 06/2011: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at IUGG conference, Melbourne, Australia.
- 06/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at IPY Oslo conference, Oslo, Norway.
- 03/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Poster at the “State of the Arctic” conference, Miami, USA.

#### **Future freshwater export from the Arctic according to GCM scenarios**

- 10/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the AOSB-ASOF Workshop on the integrated Arctic Ocean Observing System, Woods Hole, USA.

#### **Comparison of the simulated Arctic freshwater export variability from different models**

- 10/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the 14th AOMIP workshop, Woods Hole, USA.

#### **Arctic FW budget in the CCSM4 - a first look**

- 07/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the CESM Polar Climate WG meeting, Breckenridge, USA.

#### **Changes in the freshwater export from the Arctic under doubling of CO<sub>2</sub>**

- 06/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the IPY Oslo conference, Oslo, Norway.
- 03/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Poster at the “State of the Arctic” conference, Miami, USA.

#### **Mentor panel discussions - an easy way to get people talking**

- 06/2010: A. Jahn**, Penelope Wagner, Harry Borlase, Jenny Baeseman, Poster at the IPY conference, Oslo, Norway.

#### **Arctic freshwater export variability: A detailed model study**

- 02/2010: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the CESM Polar WG meeting, Boulder, USA.
- 12/2009: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Poster at the AGU fall meeting, San Francisco, USA.

#### **Comparison of Arctic freshwater export variability from different models - A first look**

- 10/2009: A. Jahn**, Oral presentation at the 13th AOMIP workshop, Woods Hole, USA.

#### **Arctic freshwater pathways and freshwater export variability**

- 07/2009: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the MOCA-09 conference, Montreal, Canada.
- 06/2009: A. Jahn**, L. B. Tremblay, R. Newton, M. M. Holland, L. A. Mysak, Oral presentation at the CMOS conference, Halifax, Canada.

#### **Effect of the large-scale atmospheric circulation on Arctic Ocean freshwater exchange**

- 01/2009: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation at the 12th AOMIP workshop, Woods Hole, USA.
- 04/2008: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation at the EGU meeting, Vienna, Austria.
- 01/2008: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation at the CESM Polar Climate WG meeting, Boulder, USA.

#### **Interannual variability in the Arctic Ocean freshwater balance**

- 07/2007: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Poster at the international sea ice summer school, Svalbard, Norway.
- 05/2007: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation at the CMOS /CGU/AMS conference, St. John's, Canada.
- 05/2007: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Poster at the Arctic Research Consortium of the United States Arctic Forum 2007, Washington DC, USA.

#### **Freshwater storage changes in the Arctic Ocean**

- 03/2007: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation at the McGill Graduate Student Research Symposium, Montreal, Canada.

#### **Freshwater in the Arctic Ocean**

- 09/2006: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation at the Bjerknes summer school on multidecadal climate variability and teleconnection dynamics, Bergen, Norway.
- 06/2006: A. Jahn**, L. B. Tremblay, R. Newton, L. A. Mysak, Oral presentation in the polar research group at Lamont-Doherty Earth Observatory, New York, USA.

#### **Contribution of vegetation dynamics to climate variations during MIS 3/2**

- 06/2006: A. Jahn**, M. Claussen, A. Ganopolski, V. Brovkin, Poster at the CMOS conference, Toronto, Canada.

#### **Quantifying the effect of vegetation dynamics on the climate of the LGM**

- 06/2005: A. Jahn**, M. Claussen, A. Ganopolski, V. Brovkin, Oral presentation at the CMOS conference, Vancouver, Canada.

### TEACHING ACTIVITIES

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#### Courses taught at CU-Boulder

Newly developed 3 credit classes are underlined

- ATOC3700    Research Experience in ATOC, Fall 2021 % Fall 2023, 3 credit course-based undergraduate research experience (CURE), with 7 & 13 students.
- ATOC6800    Scientific Writing, Fall 2019, 3 credit graduate course, with 7 graduate students.
- ATOC4850/  
ATOC5850    Numerical methods and modeling, Spring 2018 & Spring 2019  
3 credit methods course, cross-listed undergraduate and graduate, with 19 & 11 students
- ATOC5051    Introduction to Physical Oceanography, Fall 2016 & 2017 & 2018, 3 credit core graduate course for ATOC students, 9 & 13 & 9 students
- ATOC1060    Our changing environment, Spring 2015 & Spring 2017 & Fall 2020 & Spring 2021, 3 credit introduction to climate change course for non-science majors, in 2017, 2020, 2021 with weekly recitations, 2020 & 2021 taught remotely, with 100 & 106 & 84 & 78 students

#### Seminars taught at CU-Boulder

- ATOC6020    Career Development, Fall 2018, 1 credit seminar, Fall 2018. One of two faculty advisors for a seminar with 18 graduate students on career development, initiated and led by a graduate student.



- ATOC6020 Science Communication, Spring 2018**, 1 credit seminar, Spring 2018. Faculty advisor for a seminar with 15 students on science communication, initiated and led by three graduate students.
- ATOC6020 Climate Modeling Seminar, Fall 2016, Spring 2017, Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2023, Spring 2024**, 1 credit seminar, with various topics relevant to climate modeling research and skill-building for graduate students, with 1–4 students.

### Other teaching activities

- 2024 Invited lecturer at the Consortium for the Advancement of Marine Arctic Science Winter school**, for a lecture on Arctic sea ice - ocean validation metrics
- 2023 Presented a hand-on ocean stratification and melting ice activity** during a public outreach event in Nuuk, Greenland, as part of the NSF project on Davis Strait.
- 2023 Taught one 2h module on "How do we know why climate is changing?" for STEM Teachers** as part of a Curriculum Development Workshop that is part of the Outreach activity for the Arctic Microplastics NSF project.
- 2022 Taught one 2h module on "Numerical Modeling" for STEM Teachers** as part of of a Curriculum Development Workshop that is part of the Outreach activity for the Arctic Microplastics NSF project.
- 2019 Invited polar modeling expert at the CESM Polar Modeling Workshop**, discussed and reviewed polar modeling proposals with students, NCAR, Boulder, USA.
- 2018 Invited International Polar Climate Summer School lecturer**, lectures/talks<sup>d</sup> on Arctic sea ice change and Arctic climate projections, Nanjing, China.
- 2017 Invited guest lecturer on Paleoclimate**, Academy of Livelong Learning in Denver in the class "Our Biosphere: Past and future".
- 2017 Invited Arctic summer school lecturer**, lectures/talks<sup>d</sup> on Climate Modeling, Arctic sea ice projections, and Sea ice model assessment and student mentoring at the "Connaught Summer Institute in Arctic Science: Atmosphere, Cryosphere, and Climate", Alliston, Canada.
- 2014 Teaching methods workshop at NCAR**, participant in a two day teaching methods workshop at NCAR, with a focus on active learning techniques.
- 2013–2014 UCAR Science Education Program Staff (SPARK)**, gave several dozen of the public tours at NCAR, to visitors, K-12 student groups, and community groups and participated in school group classroom instruction.
- 2012 Facilitator in the NCAR Research Experience Teacher's Institute**, facilitated the online course "Earth System Science: A Climate Change Perspective" and worked with the teachers on their class modules during the three-week in-residence program.
- 2011 Guest lecturer on Polar climate at Howard University**, two guest lectures in the graduate level class ATMOS 201 in the Department for Physics and Astronomy at Howard University, USA.
- 2010 -2011 NCAR Girl Scout day**, Science lecturer (2010) and main organizer (2011)
- 2008 Graduate course on research-based teaching methods**, 3 credits, "Teaching and Learning in Higher Education" (EDPH689), McGill University, Canada.
- 2006 Teaching assistant for "Introduction into Ocean Sciences"** at McGill University.

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<sup>d</sup>Also listed under invited talks

## Advising of Students and Postdocs

<sup>1</sup> = Jahn as primary advisor for student or postdoc

<sup>2</sup> = Jahn as co-advisor/mentor for student or postdoc

### Graduate Program Director

**Fall 2023–** Graduate Program Director for the Department of Atmospheric and Oceanic Sciences at CU Boulder, with about 60 graduate students in the program

### Postdocs advised (3)

**2024–** **Lingwei Li**<sup>1</sup>

**2019–2021** **Hannah Zanolowski**<sup>1</sup>

- Now Assistant Professor at University of Wisconsin-Madison

**2016–2018** **Yafang Zhong**<sup>1</sup>

- 50% appointment for 18 months; worked remotely from University of Wisconsin-Madison

- co-advised with G. Miller & A. Geirsdottir

- Now Associate Researcher at University of Wisconsin-Madison

### Graduate students advised (9)

**2022–** **Adam Aleksinski**<sup>2</sup>

- PhD student at Purdue Univ., primary advisor Matthew Huber.

**07/2021–** **Jed Lenetsky**<sup>1</sup>

**05/2020–** **Chris Wyburn-Powell**<sup>1</sup>

**2017–2021** **Patricia DeRepentigny**<sup>1</sup>

- PhD 2021; First ASP postdoc at NCAR, now postdoc at UC Louvain, Belgium

**2017** **Aaron Schroeder**<sup>1</sup>

- Now working as Software Engineer

**2017–2019** **Mark England**<sup>2</sup>

- PhD 2019, primary advisor Lorenzo Polvani, Columbia Univ.

**2016–2020** **Abigail Smith**<sup>1</sup>(previously Ahlert)

- PhD 2021; First Associate Scientist at NCAR; Now Senior Associate, PricewaterhouseCoopers

**2016–2018** **Rory Laiho**<sup>1</sup>

- MS 2017

**2016–2018** **Sifan Gu**<sup>2</sup>

- PhD 2018, primary advisor Zhengyu Liu, Univ. Wisconsin

- Now Associate Professor at Shanghai Jiao Tong University, China

### Undergraduate students advised (8)

**2022** **Patrick Ugrinow**<sup>1</sup>

- Undergraduate research on the future of the North Water Polynia

**2022** **Rajan Patel**<sup>1</sup>

- Undergraduate research on the past evolution of the North Water Polynia

**2022** **Daphne Quint**<sup>1</sup>

- Undergraduate research on the contribution of RILEs to an early ice-free Arctic

**2022** **Nathanael Farmer**<sup>1</sup>

- Undergraduate research on predictors of an early ice-free Arctic

- 2021**            **Ivonne Martinez<sup>2</sup>**  
 - ATOC summer REU student, undergraduate research on north water polynia, co-advised with H. Zanowski and P. DeRepentigny; main advisor J. Moriarty
- 2020–2021**    **Sara Reinelt<sup>2</sup>**  
 - undergraduate student research on paleo climate, co-advised with H. Zanowski
- 2017–2018**    **Kerrie Ellzey<sup>1</sup>**(previously Dochen)  
 - 9 month undergraduate student research on Arctic sea ice
- 2010**            **Daniel Pollak<sup>2</sup>**  
 - co-advisor of NCAR-SOARS undergraduate summer student on Arctic sea ice

#### Committee member (14)

- 2023–2024**    **Jakob Dörr** External PhD examiner for PhD thesis and opponent at PhD defense, Univ of Bergen, Norway
- 2023–**            **Jim Gutoski** PhD committee member in CU’s Geological Sciences
- 2023–**            **Tina Geller** ATOC PhD committee member
- 2023–**            **Ziqi Yin** ATOC PhD committee member
- 2023–**            **Megan Thompson-Munson** ATOC PhD committee member
- 2022–**            **Cole Persch**, ATOC PhD committee member
- 2022–**            **Sean Leister**, ATOC PhD committee member
- 2022–**            **Brianna Undzis**, ATOC PhD committee member
- 2021**            **Angelica Pasqualini**, PhD defense committee member (Columbia University)
- 2020–2022**    **Eric Keenan**, ATOC PhD committee member
- 2020–2021**    **Jed Lenetsky**, Geological Sciences, Master thesis committee member
- 2019**            **Marissa Dattler**, ATOC Master thesis defense committee member
- 2019**            **David Harning**, Geological Sciences, PhD defense committee member
- 2018–2022**    **Meghan Helmberger**, Geography PhD committee member
- 2018–2020**    **Sean Horvath**, Civil, Environmental & Architectural Engr., PhD committee member
- 2017–2019**    **Michael Drew Cameron**, ATOC Master thesis committee member
- 2016–2019**    **Michael Gallagher**, ATOC PhD committee member

#### Host of visitor to research group (2)

- 2022**            **Adam Aleksinski**, 1 month visit to CU and NCAR for work on a joint project, PhD student at Purdue Univ. with Matthew Huber
- 2018**            **Clara Burgard**, 2 month visit, PhD student with Dirk Notz at MPI Hamburg

#### COMMUNITY SERVICE

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- 2023–**            **Member of the CLIVAR/CliC Northern Oceans Region Panel**
- 2022/23**        **Steering committee member for the 2023 IGS Sea Ice Symposium**
- 2022**            **Ex-officio member of the CLIVAR/CliC Northern Oceans Region Panel**
- 2021/22**        **INSTAAR executive committee member**
- 2021/22**        **Session organizer and chair/co-chair for three sessions at the 2022 Ocean Sciences meeting** (Arctic Ocean Gateways (HL07), Arctic Ocean Processes (HL10), and Paleoceanography, Paleocology and tectonic evolution across the Cenozoic (OC13))

- Since 2021**     **Member of the International Science Steering Group for Arctic Subarctic Ocean fluxes (ASOF)**
- 2019**            **Organizer of 2019 SIMIP workshop, Winnipeg, Canada**
- 2019**            **Session chair at the 15th AMS Polar Conference, Boulder, USA**
- 2019**            **NOAA proposal review panelist**
- Since 2018**     **Co-lead of one of the WCRP-Polar Climate Predictability Initiatives, Theme “Improve knowledge and understanding of past polar climate variations (100+ years)”**
- 2018-2022**     **Advisory Board member for the DOE project HiLAT-RASM**
- 2018–2019**     **Science Requirements Advisory Panel for NCAR’s next supercomputer**
- 2018–2020**     **US-CLIVAR Paleo AMOC Task Team member,**
- 2018**            **Expert reviewer for IPCC reports, Reviewed chapters in special IPCC reports (Global Warming of 1.5 °C; Ocean and Cryosphere in a Changing Climate).**
- 2018**            **External reviewer for two scientific promotion/hiring decisions**
- 2018**            **Session convenor and chair at POLAR2018, Davos, Switzerland, session “Sea ice Modeling and Prediction”**
- 2017**            **Co-organizer of the 2017 Polar prediction & SIMIP workshop, Bremerhaven, Germany**
- 2015**            **Organizer of CliC SSG annual meeting, Boulder, USA**
- 2014**            **Co-Organizer of the 2014 SIMIP workshop/ Large-Scale Sea-Ice Simulations Workshop, Reading, UK**
- 2014–2023**     **Co-chair of Sea ice MIP (SIMIP) for CMIP6,**  
<https://www.wcrp-climate.org/modelling-wgcm-mip-catalogue/cmip6-endorsed-mips-article/1056-modelling-cmip6-simip>
- 2014–2023**     **Co-chair of Sea ice and Climate Modeling Forum of CliC-WCRP,**  
<http://www.climate-cryosphere.org/activities/seaicemodeling>
- 2014–2018**     **WCRP-CliC steering committee member**
- 2015**            **Session convenor at IUGG 2015, Prague, Czech Republic, proposed and organized session on “Evaluation of the Cryosphere in CMIP5 Models”, but could not chair it due to parental leave.**
- Since 2011**     **Proposal reviewer for NSF**
- 2011–2012**     **Co-convenor and co-chair at IPY 2012, session “Diminishing snow and ice”, Montreal, Canada.**
- 2011–2012**     **Co-chair at 2011 IUGG, session “Future state of the Arctic and potential impact”, Melbourne, Australia.**
- 2010**            **NSF proposal review panelist**
- 2010–2011**     **Member of the IUGG Advisory Group of Young Scientists, IAPSO representative**
- 2009–2010**     **Main organizer of a two-day Association for Polar Early Career Scientists (APECS) career development workshop before the IPY conference, Oslo, Norway.**
- 2009**            **Organizer of an APECS career panel at the MOCA-2009 conference, Montreal, Canada.**
- Since 2008**     **Reviewer for journal articles (over 60 reviews)**

*Last updated: January 26, 2024*