

# Laure Zanna

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## Professional Appointments

- 2024 – present      ◇ Joseph B. Keller and Herbert B. Keller Endowed Professor of Applied Mathematics, 2024–, **New York University, Courant Institute**, USA.
- ◇ Professor of Mathematics & Data Science, **New York University, Center for Data Science**, USA.
- 2019 – 2024      ◇ Associate Professor (with tenure), 2019 - 2020, **New York University, Courant Institute**, USA.
- 2011 – 2020      ◇ Associate Professor/Lecturer (tenured 2016), **University of Oxford**, Physics, UK.
- 2009 – 2011      ◇ James Martin Research Fellow, Oxford Martin School & Dept of Physics and Junior Research Fellow, Balliol College. **University of Oxford**, UK.

## Education

- 2009      ◇ **Ph.D., Harvard University**. Earth & Planetary Sciences. Adviser: Prof Eli Tziperman.
- 2003      ◇ **M.Sc. Weizmann Institute of Science**. Environmental Sciences.
- 2001      ◇ **B.Sc. Tel Aviv University**. Geophysics, Atmospheric & Planetary Sciences.

## Bibliography

- 1 S. Dheeshjith, A. Subel, A. Adcroft, *et al.*, “Samudra: An ai global ocean emulator for climate,” *Geophysical Research Letters*, vol. 52, no. 10, e2024GL114318, 2025.
- 2 S. Dheeshjith, A. Subel, S. Gupta, *et al.*, “Transfer learning for emulating ocean climate variability across CO<sub>2</sub> forcing,” *ICML 2024 Workshop on Machine Learning for Earth System Modeling*, arXiv:2405.18585, 2024.
- 3 A. Subel and L. Zanna, “Building ocean climate emulators,” *ICLR Workshop*, arXiv preprint arXiv:2402.04342, 2024.
- 4 P. Perezhogin, L. Zanna, and C. Fernandez-Granda, “Generative data-driven approaches for stochastic subgrid parameterizations in an idealized ocean model,” *Journal of Advances in Modeling Earth Systems*, vol. 15, no. 10, e2023MS003681, 2023.
- 5 A. Ross, Z. Li, P. Perezhogin, C. Fernandez-Granda, and L. Zanna, “Benchmarking of machine learning ocean subgrid parameterizations in an idealized model,” *Journal of Advances in Modeling Earth Systems*, vol. 15, no. 1, e2022MS003258, 2023.
- 6 C. Zhang, P. Perezhogin, C. Gultekin, A. Adcroft, C. Fernandez-Granda, and L. Zanna, “Implementation and evaluation of a machine learned mesoscale eddy parameterization into a numerical ocean circulation model,” *Journal of Advances in Modeling Earth Systems*, vol. 15, no. 10, e2023MS003697, 2023.

- 7 **L. Zanna** and T. Bolton, “Data-driven equation discovery of ocean mesoscale closures,” *Geophysical Research Letters*, vol. 47, no. 17, e2020GLo88376, 2020.
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