Anna Lina Petruseviciute **Sjur**

PhD candidate

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PhD student in Physical Oceanography with a background in physics and a fascination for mathematics and statistical learning methods. Expertise in numerical modeling, data analysis and theoretical investigation. Experienced in teaching and presenting research.

Education

September 2021 – present | **PhD in Physical Oceanography, University of Oslo**
- Thesis on large-scale Arctic Ocean circulation, with a focus on flow-topography interactions.

August 2019 – August 2021 | **Master's Degree in Geosciences | Meteorology and Oceanography, University of Oslo**
- Thesis with a scope of 60 ECTS. Investigated dynamics of ocean flow over a canyon, with a focus on theory development and numerical modeling.

August 2018 – June 2019 | **Single Courses, University of Oslo**
- Completed courses in computational physics, mathematical analysis, and literature.

August 2015 – June 2018 | **Bachelor's Degree in Physics, Astronomy and Meteorology, University of Oslo**
- Specialized in Meteorology and Oceanography. Extended coursework beyond the standard curriculum, including statistics and mathematics.
- Exchange semester at **The University Centre in Svalbard** (UNIS).

August 2014 – May 2015 | **Lithuanian Studies, Vilnius university**
- Completed coursework on lithuanian language and history.

Experience

September 2021 – present | **PhD Candidate – Department of Geosciences, University of Oslo**
- Applied theory development to analyze large geophysical datasets.
- Designed and executed numerical simulations of fluid dynamics.
- Developed and maintained reproducible workflows (Python, Julia, Git, HPC).
- Authored and co-authored peer-reviewed articles.
- Research visit at **Stockholm University**, Sweden, for 2 months.

August 2016 – Present | **Teaching Assistant, University of Oslo**
- Taught various courses in mathematics, geophysics and modelling..
- Responsible for organizing weekly group sessions of up to 30 students, preparation of teaching material, and grading of assignments.

January 2020 – May 2021 | **Research Assistant | Part-Time Student Job, Norwegian Meteorological Institute**
- Analyzed aerosol trends in CMIP6 climate models and observations as part of the Climate Modelling and Air Pollution group.

August 2020 – March 2021 | **Weather in a Tank Laboratory Work | Part-Time Student Job, University of Oslo**
- Developed and conducted fluid dynamics demonstrations for educational use.

August 2018 | **Math Teacher, Sommerskolen Oslo**
- Responsible for preparing and delivering the course *Forsmak på R2*.

October 2016 – March 2020 | **Substitute Teacher, Oslo katedralskole VGS**
- On-call substitute teacher in upper secondary school. Planned and delivered lessons in physics and mathematics on all levels.

Relevant Courses

STK-IN9300	Statistical Learning Methods in Data Science
FYS-STK4155	Applied Data Analysis and Machine Learning

Publications

2025 Shaun Jonston, **Anna Lina Petruseviciute Sjur**, Pål Erik Isachsen, Joseph Henry LaCasce. *Eddy- and wind-driven circulation in the enclosed basins of the Norwegian Sea evaluated using a model and absolute geostrophic flow from Argo*. Journal of Geophysical Research : Oceans, 130(7), e2024JC021990. https://doi-org.ezproxy.uio.no/10.1029/2024JC021990

2025 **Anna Lina Petruseviciute Sjur**, Pål Erik Isachsen, Johan Nilsson, Joseph Henry LaCasce, Magnus Dyrmose Ryseth. *The wind-driven time-variable circulation in the Arctic Mediterranean*. Journal of Geophysical Research : Oceans, 130(4), e2024JC021713. https://doi-org.ezproxy.uio.no/10.1029/2024JC021713

Selected Outreach & Communication

2025 *Finner turbulens og uvær i havstrømmene*. Interview in UiO's popular science research magazine. Available at titan.uio.no

2025 *Idealized models for understanding Arctic Ocean Circulation*. Invited seminar at Statkraft. Supplementary material available at psjur.no

2025 *Flow asymmetry over topography : Implications for large-scale circulation*. Talk at at EGU General Assembly, Vienna. Supplementary material available at psjur.no

2024 *The Time Variable Circulation of the Arctic Ocean and Its Surrounding Seas*. Invited talk at IARPC Collaborations. Recording available on YouTube.

2023 *Analytical Model for Wind-Driven Ocean Flow Predicts Circulaiton in Arctic Mediterranian*, Poster at IUGG23. Poster available at psjur.no

Extracurricular Activities

2020	Student representative in hiring committee.
2017	Space Weather Science School, Tokyo, Japan.
2015-2016	Member of physics student committee (Fysisk fagutvalg).
2016	Barista in student cafe.

References on request