

Mikkel Langgaard Lauritzen

mikkel.lauritzen@nbi.ku.dk • +45 20 69 82 68 • 



Curriculum Vitae

Personal Profile

I am a Ph.D. student in ice flow modeling at the Niels Bohr Institute, University of Copenhagen deeply invested in understanding the dynamics of glaciers and ice sheets and their interplay with the atmosphere. I have experience with teaching and I enjoy discussing physics in a positive and collaborative work environment.

Education

- 2019–2021 **MSc in physics**, University of Copenhagen,
Thesis: *Fermionic Duality for Integrable Super Spin Chains*
supervised by Charlotte Fløe Kristjansen
- 2016–2019 **BSc in physics**, University of Copenhagen,
Thesis: *Effective Field Theory for QCD - at Non-zero Lattice Spacing* in
collaboration with Benjamin Søggaard, supervised by Kim Splittorff
- 2018 **Exchange student**, University of British Columbia, Vancouver
- 2012–2015 **High school**, Roskilde Katedralskole,
SRP: *Ellipses and Planetary Motion*

Selected Experience

- 2019-2021 **Teaching Assistant**, University of Copenhagen
Taught exercise classes, grading homework, going over problems together with the students and helping them out in the laboratory. Courses taught:
- 2022-2023 Electrodynamics 2
 - 2022 Mathematics F2 (Complex analysis)
 - 2021-2022 Electrodynamics 2
 - 2020-2021 Introduction to Linear Algebra and Calculus (LinAlys)
 - 2020 Catch-up café in LinAlys in coordination with Sune Rasmussen
 - 2020 Mathematics F2 (Complex analysis)
 - 2019 Electrodynamics 2
 - 2019 Electrodynamics 1
- 2018 **Private Teacher**, Mentordanmark
Helped high school students with mathematics and preparing them for exams.

2015-2016 **Ski Representative**, Thinggaard Rejser, Zell am See
Guided ski tours, organized events, and provided customer service.

Publications

- 2021 M. Kieburg, M. Lauritzen, B. T. Sogaard, and K. Splitdorff, “New term in effective field theory at fixed topology”, *Phys. Rev. D* **103**, 014501 (2021)
- 2023 A. Fichtner, C. Hofstede, B. L. N. Kennett, N. F. Nymand, M. L. Lauritzen, D. Zigone, and O. Eisen, “Fiber-Optic Airplane Seismology on the Northeast Greenland Ice Stream”, *The Seismic Record* **3**, 125–133 (2023)
- 2023 M. Lauritzen, G. Aðalgeirsdóttir, N. Rathmann, A. Grinsted, B. Noël, and C. S. Hvidberg, “The influence of inter-annual temperature variability on the Greenland Ice Sheet volume”, *Annals of Glaciology*, 1–8 (2023)

Volunteer Work

- 2017, 2019, 2020 Tutor for the new bachelor and master students, organized cabin trips, campus tours, and helped the new students feel welcome at NBI.
- 2017–2019 Participated in Fysik Revy™, the annual physics cabaret at NBI.
- 2017, 2019 Helped organize the annual physics galla at NBI, Kæmpefest.

Computer Skills

- Programming Proficient in Python and Matlab with applications in data processing, simulations, machine learning, visualizations, and large-scale data-analysis. Solved more than 80 problems in Project Euler using Python.
- Other Well versed in L^AT_EX, Linux, Mathematica, Google Colab, Git, and SQL. Some experience with HTML, PHP and CSS.

Miscellaneous

- Interests Apart from physics, maths and programming my interests are nature, hiking, skiing, cooking, technology, and football.
- Languages I am fluent in Danish and English, and speak a little French.

Copenhagen, August 22, 2023