Mikkel Langgaard **Lauritzen**

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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 Søgaard, 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. Søgaard, and K. Splittorff, "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, et al., "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, et al., "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 LaTeX, Linux, Mathematica, Google Colab, 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 21, 2023