

Alice Furlotti

Post Degree Researcher -Ice Sheet and Earth System Modelling



CMCC Foundation - Viale C. Berti Pichat 6/2, 40127 Bologna (Italy)



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About me -

I am a young Post Degree scientist with a passion for glaciology. Fascinated by cryospheric dynamics, I am driven by a deep curiosity about their evolution during Earth's history and their sensitivity to climate change. I am eager to contribute to our understanding of Earth's natural systems and explore ways to address the challenges posed by their dynamic nature.

Areas of specialisation —

Glaciology • Ice-sheet modelling • Ice dynamics • Earth System modelling • Quaternary sedimentology • Paleoenvironmental reconstruction

Summary

I collaborate with CMCC Foundation in implementing the land ice component within the Earth System model CMCC-CM. I completed my Master's degree at the Department of Physical Geography, Stockholm University, in June 2024, specialising in "Polar Landscapes and Quaternary Climate". Ice dynamics in Polar regions and the relationship between cryosphere, landscape and climate constitute the main focus of my recent education. My previous scientific background is highly interdisciplinary and encompasses the fields of physical geography, geology, physics, biology, and environmental science. During my Master's years, I gained first-hand field experience in Arctic, sub-Arctic and mountainous environments, such as the Svalbard Archipelago, Northern Scandinavia and the Brenta Dolomites. Thanks to a collaboration with Fondazione Golinelli, I developed relevant skills in Science Communication.

Experience

2/2025-present Post Degree Researcher in Ice Sheet Modelling **CMCC** Foundation

> Post-degree collaboration with CMCC Foundation (Euro-Mediterranean Center on Climate Change) aimed at implementing the land ice component in the comprehensive Earth System model CMCC-CM.

2024-present Science communicator

Fondazione Golinelli

Lead Tutor for STEM Educational Activities (Ages 0-13).

6-9/2021 Intern and assistant to fieldwork activities Adamello Brenta Nature Park

> Internship at the Scientific Research Office of Adamello Brenta Nature Park conducted within the framework of the *BioMiti* project and focused on the monitoring of local fauna and alpine ecosystems (e.g. alpine

avian communities in proglacial areas).

Education

2022 - 2024 M.Sc. in Polar Landscapes and Quaternary Climate Stockholm University Master's Programme focused on the evolution of Earth's cryosphere in

a changing climate and Quaternary climate history at high latitudes.

- Thesis: "3D-Modelling of Ice Dynamics at C.H. Ostenfeld Glacier, Northern Greenland" (60 credits), published on DiVA portal.
- Final thesis grade: A.
- · Total amount of credits: 120.
- GPA (independently calculated): 4.00/4
- Address: Svante Arrhenius väg 8, Stockholm (Sweden).

2018 - 2021 **B.Sc.** in Environmental Sciences University of Bologna

Highly interdisciplinary Bachelor's Programme. Relevant focuses: Earth Science, Chemistry, Biology, Ecology, Oceanography, Mathematics, Physics.

- · Total amount of credits: 180.
- Final grade: 110/110 cum laude.
- GPA (independently calculated): 4.00/4.
- Adress: Via Zamboni 33, Bologna (Italy).

2013 - 2018 **Scientific High School** Liceo Scientifico Galileo Galilei

Specialisation in mathematics and physics. Other relevant subjects: nature science, Latin, German.

- · Address: Viale Bolognini 88, Trento (Italy).
- Final grade: 100/100 cum laude.

Scholarships and Awards

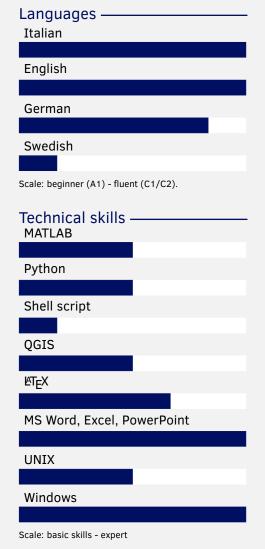
"Premio di studio per studenti meritevoli 2019/2020" - Study Award to 2020 Meritorious Students 2019/2020. University of Bologna

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Personal interests —

- · Alpine and polar glaciology
- Alpine and polar geomorphology
- Quaternary ice ages and archaeology
- Science communication and divulgation
- Philosophy of science and classical literature



Other Education and certifications

6-7/2023 "Sedimentology Field Course - from Depositional Systems to Sedimentary Architecture" (10 credits) in Longyearbyen, Svalbard. Relevant

project topic: Evolution of Glacial Landscapes after the Little Ice Age.

UNIS - The University Centre in Syalbard

6/2023 "UNIS Polar Bear Safety course" UNIS - The University Centre in Svalbard

6/2023 "UNIS Survival Suit course" UNIS - The University Centre in Svalbard

2021-2022 Single learning activities at the Geology Department of Alma Mater Stu-

diorum - University of Bologna (22 credits). Subjects: Sedimentology and Stratigraphy, Mineralogy, Geology of Italy.

University of Bologna

Volunteering experience

11/2021 Nival field data reviewer SAT - Trento Alpinists' Society

Volunteering experience at the Glaciological Committee of SAT - Trento Alpinists' Society (Trento, Italy), dealing with the assessment of spreading algal blooms (*Chlamydomonas nivalis*) on snow cover in the Italian Rhetian Alps. Main contributions: Field data classification and review.

Networks and Memberships

2024-present APECS Italy - Association of Polar Early Career Scientists (Italian

branch of the international association based in Tromsø, Norway).

Master student member.

2024-present QRA - Quaternary Research Association (London, United Kingdom).

Student member.

2023-2024 Bolin Centre for Climate Research (Stockholm University, Stockholm,

Sweden). Master student member.