Marco Belli

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bellimarco.github.io

Education

2024-Present **MSc, Mathematics**, ETH Zürich.

Fall 2024 Exchange semester: University of Texas at Austin.

2021-2025 **BSc, Mathematics**, ETH Zürich.

Research Interests

Complex and algebraic geometry, algebraic curves, Abelian varieties and the moduli spaces related to them. Number theory and applications to cryptography.

Works

Master's thesis: The intermediate Jacobian of the cubic threefold (*draft*) - website.

The isomorphism to Čech cohomology as evaluation on the Čech nerve (2025) - arXiv:2510.21486.

Getzler-Kapranov graph complex cohomology computations in weight 13 (2025) - arXiv:2507.08995.

Riemann Surfaces as an elementary theory for the solvability of analytic equations (2025) - website.

Bachelor's thesis: On the construction of Hilbert and Quot schemes (2024) - website.

Academic Experience

Fall 2025 Exam correction, Linear Algebra and Complex Analysis, ETH Zürich.

Spring 2025 Exam correction, Topology and Basic Structures, ETH Zürich.

Spring 2025 Teaching assistant, Algebra II, ETH Zürich.

2024-2025 Private tutoring, various subjects, EduQuant platform.

Fall 2024 Exam correction, Complex Analysis, ETH Zürich.

Spring 2024 Teaching assistant, Analysis II, ETH Zürich.

Spring 2023 Teaching assistant, Mathematics II, ETH Zürich.

Attended Conferences

Sep 11-19 2025 Nairobi Workshop in Algebraic Geometry, University of Nairobi, Kenya.

Jun 9-13 2025 Harmonies in Moduli Spaces, Università Roma Tre, Italy.

Internships

Sep-Nov 2025 Dedan-Kimathi University of Technology, Nyeri, Kenya. Department of robotics and mechatronics. Tasks: assisting students with various final-year robotics projects.

Hard Skills

Programming: C++, Python, SQL, Processing, Javascript, basic client and server side.

Software: Mathematica, Maple, Lean, SageMath, Matlab/Simulink, Siemens TIA, Fusion360.

Robotics and mechatronics: kinematics and dynamics, ROS, Raspberry Pi ecosystems, integrating microcontrollers with sensors and actuators, control systems, basic electrical engineering.

Other Interests

Genus Two Applet: a p5.js based web application for visualizing the embeddings of genus two curves into their Jacobians for varying moduli.

Building robots and DIY projects. My github portfolio is at *bellimarco*.

History of science, physics, logics, computer formalization.

Literature, languages, traveling, hiking.