

CV

Michael Muehlebach leads the independent research group Learning and Dynamical Systems.

Michael studied mechanical engineering at ETH Zurich and specialized in robotics, systems, and control during his master's degree. He received the B.Sc. and the M.Sc. in 2010 and 2013, respectively, before joining the Institute for Dynamic Systems and Control for his Ph.D. He graduated under the supervision of [Prof. R. D'Andrea](#) in 2018. He then joined the group of [Prof. M. I. Jordan](#) at the University of California, Berkeley as a postdoctoral researcher.

His research lies at the intersection between machine learning, dynamical systems, and mathematical optimization. During his PhD, he worked on approximations of the constrained linear quadratic regulator problem with applications to model predictive control (see for example [here](#)). He also designed control, estimation, and learning algorithms for a [balancing robot](#) and a [flying machine](#). His postdoctoral research aimed at analyzing gradient-based optimization algorithms and rigorously characterizing the mechanisms leading to accelerated convergence (see for example [here](#)).

He received the Outstanding D-MAVT Bachelor Award, the Willi-Studer prize for the best master's degree, and the ETH Medal and the HILTI prize for his doctoral thesis. He is a [Branco Weiss Fellow](#) since 2018 and was awarded the [Emmy Noether Fellowship](#) in 2020.