

PhD Course

## Supervised and Causal Machine Learning

Block course

Time: 31th May – 4th June, 2021, 09:00 - 12:00

**Course instructor:** Professor Michael C. Knaus

Michael Knaus is an Assistant Professor of Econometrics at the Swiss Institute for Empirical Economic Research of the University of St. Gallen and part of the Data and Method Consulting that advises students and faculty regarding their empirical work. His research interests are at the intersection of causal inference and machine learning to answer questions in empirical, mostly labor, economics.

**Course value:** 2 SWS or 5 LP

**Course Overview:** Participants of this course will learn and apply recent Supervised and Causal Machine Learning methods to analyse effects of either experimental or observational interventions.

**Topics:** This course will focus on tools that are already mature in the sense that they are easy to implement for practitioners and covers three major topics:

1. Estimation of heterogeneous effects for experimental data
2. Estimation of average and heterogeneous effects for observational data

**Teaching language:** English

**Teaching methods:** Presentation, using an R notebook

**Registration:** Register via [anmeldung@hche.de](mailto:anmeldung@hche.de)