universität innsbruck
Digital Science Center (DiSC)

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Department of Economics

DiSCourse Seminar

The Digital Science Center and the Department of Economics would like to invite you to the following presentation:

Felix Holzmeister
University of Innsbruck

The Variability of Scientific Results: Analytical and Design Heterogeneity

In science, evidence is generated to test hypotheses in an evidence-generating process (EGP). This talk summarizes the results of two large-scale, crowd-sourced projects, highlighting that EGP variation across researchers adds uncertainty over and above the sampling variation incorporated into standard statistical testing. In the first study – the *Finance Crowd Analysis Project (#fincap)* –, we show that the variation in scientific results attributable to different analysis pipelines chosen by independent researchers results in uncertainty on par with the magnitude of standard errors. In the second study – *#ManyDesigns* –, we provide evidence that various conceivable research designs proposed by independent researchers to test the same hypothesis give rise to systematic variation in effect size estimates. Both studies indicate that the informativeness and generalizability of results based on the implementation of a single path of an EGP multiverse are limited.

About the speaker

Felix Holzmeister is an assistant professor at the Department of Economics at the University of Innsbruck. Apart from behavioral and experimental economics and finance, his research interests revolve around reproducibility of experimental results in the behavioral sciences as well as open-science and meta-science topics. He is an associated scholar of the Digital Science Center, who also teaches courses for the Minor Digital Science.

Date and Time: Friday, 7 October 2022, 12:00 (CEST)

Please note: This presentation will be given **online** in Big Blue Button. Participants do not need to register.

Universität Innsbruck – Digital Science Center
Phone: +43 512 507 39750
E-mail: disc@uibk.ac.at