WILHELM-WUNDT-GESELLSCHAFT e. V.

Der Vorsitzende
Prof. Dr. Edgar Erdfelder

Professor Dr. Daniel W. Heck receives the science award 2025
of the Wilhelm-Wundt Society

The science award for basic psychological research 2025 goes to Professor Dr. Daniel W. Heck, Philipps University Marburg. With this decision, the Wilhelm-Wundt Society follows the proposal of an external jury of professors from various basic psychological disciplines. We would like to thank the jury members Axel Buchner (chair), Adele Diederich, Werner Greve, Barbara Krahé and Anne Schacht for their thorough review and detailed discussion of all submitted nominations, which resulted in a consensual decision proposal. The award ceremony took place on March 10, 2025, as part of the 67th Conference of Experimental Psychologists in Frankfurt.

Laudation for Daniel W. Heck

In less than 10 years after obtaining his Ph.D. degree in 2017, Daniel Heck has become one of the leading researchers in mathematical modeling of psychological processes. He succeeded in becoming an internationally well-known researcher not only in a single subfield but in several branches of basic psychological science more or less in parallel. He has become one of the protagonists in multinomial processing-tree modeling but also made use of other types of stochastic modeling when this was deemed more appropriate for his research questions. One of Daniel Heck's trademarks is Bayesian hierarchical modeling. This approach enables him to structurally link experimental and differential psychological research approaches on a formal level. He has made significant contributions to the foundations of Bayesian modeling and has also developed innovative methods and new modeling approaches. These innovations include, among other things, methods for joint modeling of discrete responses and response times as well as for the modeling of dishonesty in experimental lying paradigms. Dr. Heck generally makes methodological developments available to the scientific community in the form of open, freely accessible R packages. Of particular note is his R package TreeBUGS, which has now established itself as an indispensable standard tool for hierarchical multinomial modeling. TreeBUGs and other R packages from Daniel Heck are used not only in cognitive psychology (here especially in memory, judgment and decision-making research), but also in behavioral economic research to model ethical decisions, in social psychology to model moral judgments and prejudices, and also in psychological assessment and personality psychology, for example, to model variability and predictive validity of personality dimensions.
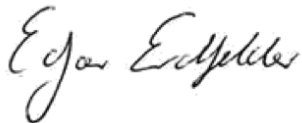
In addition to his significant innovations in the field of formal modeling, Daniel Heck has also made significant contributions to substantive science, for example on sequential collaboration in online settings and on the repetition-based truth illusion. In all his work, Daniel Heck strictly follows the principles of open science and makes materials, raw data, and analysis code openly available. In a

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nutshell, Daniel Heck's scientific oeuvre is characterized by the triad of combining sophisticated statistical modeling, its application to fundamental questions of psychology, and making the sophisticated methods accessible through user-friendly, self-developed software.

In addition to his scientific ingenuity, Daniel Heck is distinguished by his exceptional publication output. Despite the early stage of his career, he can point to more than 65 publications in international journals already. Among others, his work not only appeared in leading journals of his fields of expertise but also in renowned multidisciplinary psychology journals such as Psychological Review, Psychological Bulletin, Psychonomic Bulletin & Review and Psychological Science.

The Wilhelm Wundt Society congratulates Daniel Heck on his well-deserved success and wishes him all the best for his further academic career. We look forward to his future contributions to basic psychological research!

Mannheim and Bremen, March 2025

Edgar Erdfelder
(First Chairperson)

Bettina von Helversen
(Second Chairperson)