Statistics Seminar **Friday, March 12 12:00 - 1:00 pm**

TrainBayes – Improving Bayesian reasoning

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Abstract: Bayes formula is a main model to cope with situations under uncertainty that we call Bayesian situations. Unfortunately, people heavily struggle when dealing with Bayesian situations. This applies to young learners of statistics and probability, as well as to experts, who are requested to judge situations under uncertainty, such as physicians or lawyers. In our talk, we present research about how to improve Bayesian reasoning, that is, to deal with Bayesian situations. In this presentation we give a review of international approaches and discuss our own research. On the basis of this research, we end with our interpretation of the main aspects of Bayesian reasoning and an impression of a training course on Bayesian reasoning which we are currently developing for physicians and lawyers.

Bio Theresa Büchter: B.Sc. Psychology, M.Ed. with mathematics as primary subject, fellow at Deutsche Telekom Stiftung, since 2020-06 PHD student in the DFG-project TrainBayes at the Universität Kassel

Bio Andreas Eichler: Chair of the German Society of Mathematics Education, Full Professor for Mathematics Education at different universities in Germany (Münster, Freiburg, and currently Kassel), Dissertation 2004 referring to beliefs of statistics teachers, mathematics teacher, M.Ed. with mathematics as primary subject.