**Bayes-Statistik, SS 2021**

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**Content (chronologically)**

* Welcome
* DW: Statsomat <https://statsomat.com>
  + Minimal but sufficient GUI user-interaction
  + Automatic reporting (automated tables and graphics)
  + Human-readable interpretation
  + Downloadable and reproducible code
* DW: The goal of this course is to develop an app for a statistical application treated by Bayes-related solutions and satisfying the Statsomat philosophy
* DW: The tools used in the course: GitHub und GitHuB Desktop
  + Final evaluation by statistics of contributions (commits, additions, deletions, comments, pull requests)
* Installation: Download and Install GitHub Desktop, clone GitHub repository. Execute the starter codes. Learn to collaborate by GitHub:
  + <https://docs.github.com/en/desktop>
  + <https://docs.github.com/en/desktop/contributing-and-collaborating-using-github-desktop>
  + Statsomat/Bayes/documents/Git\_Fundamentals.md

**Literature (additional to Literature from the course of Prof. Neuhäuser)**

* + Kruschke, John K., Bayesian Analysis Reporting Guidelines, Nature Human Behaviour, 2021, <https://www.nature.com/articles/s41562-021-01177-7#rightslink>
  + Kruschke, John K., BARG-Supplement.html: <https://osf.io/w7cph/> (html file)
  + Kruschke, John K., Doing Bayesian Data Analysis, Elsevier 2015, ISBN: 978-0-12-405888-0

**Further Comments:**

* Please use the data.table package for EDA (extract, transform, load) data. Use dplyr only if really needed.
* Debugging: Discuss the errors in our group. Google the errors. Check solutions on StackOverflow or on the official GitHub pages of the R packages.
* Prerequisites: Course of Prof. Neuhäuser, minimal R programming