

Title: Workshop: Evidence, Errors, and Beliefs: A Stroll through the Statistical Inference Maze

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Abstract:

For well over two centuries, the field of statistics has been dominated by the Bayesian-frequentist debate. This debate has also found its way into psychology several years ago and evolved into what can almost be referred to as an ideological war. Especially among applied researchers, the multitude of rivaling theories and inference procedures has led to a lot of confusion about the “correct” way to do inference.

In this workshop, we will take a closer look at different positions and try to get a profound understanding of their actual philosophical and statistical underpinnings. To prepare for the workshop, participants will read some of the original work by e.g. Fisher, Neyman, Jeffreys, or Royall. During the workshop, participants will then act as “experts” for different positions while engaging in theoretical discussions and working on concrete examples. Ideally, this will not only demonstrate that there are many commonalities between the different positions, but also that each brings some individual advantage to the table. By doing so, this workshop aims at providing some insight that contributes to resolving the confusion about which statistical school is “the right one”.

Assignment: Active participation

Credit: 1 workshop day