# Propositions

accompanying the dissertation

*A Tradeoff in Econometrics*

by

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1. Current statistical methods make it difficult for researchers to control the fundamental tradeoff between the in-sample Accuracy of data-optimized parameters and the Simplicity of sticking to prior hypotheses (Chapters 2, 3, 4, and 5).

2. Current statistical methods can be refined in dealing with a second tradeoff between the in-sample Accuracy of data-optimized parameters and the Simplicity of grouping parameters together (Chapters 2, 3, 4, and 5).

3. When making use of information criteria in the context of a linear regression model, it should be recognized that a model's effective number of parameters decreases when parameters of correlated regressors are grouped together (Chapter 4).

4. Current statistical methods for weighing observations can be made more robust to changes in the underlying break process (Chapter 5).

5. Current statistical methods are computationally inefficient when it comes to selecting configurations of a model through cross-validation or information criteria (Chapter 6).

6. The alternative to accepting the dictates of reason is the void of scepticism.

7. Science ceases to exist if there is no paradigmatic way of identifying, solving, and evaluating research problems.

8. To avoid sloppy science, we do not have to develop new laws of science, but we need to impress the content of laws that already exist on researchers.

9. Top-ranked academic journals can be trusted to play a pivotal role in the self-cleansing mechanism of science, because their prestige derives from the credibility of their editorial process and from the quality of the papers they accept for publication.

10. In times where fake news is abundant, it is dangerous to undermine the institution of science, because the scientific method enables researchers to obtain a deep understanding of the underlying truth and to separate fact from fiction.

11. All of the enlisted statements are false.