

PHILOSOPHY OF STATISTICS
DISCUSSION QUESTIONS #7

- (1) To what extent can causality be defined independently of predictability? If causal hypotheses lack predictive power, what — if anything — can statistical methods meaningfully assess about them? Conversely, how should we understand models that yield reliable predictions in the absence of any clearly articulated causal structure?
- (2) Is explainability in the context of statistical models equivalent to interpretability?
- (3) Does good science require predictability, explainability, or both?