

## Theoretical Structure and Theoretical Equivalence

Our physical theories often admit multiple formulations or variants. Although these variants are generally empirically indistinguishable, they nonetheless represent the world as having very different properties. In this talk, I will discuss several criteria for comparing empirically equivalent theories that may be used to identify (1) when one variant has more structure than another (i.e., when a formulation of a theory has “excess structure”) and (2) when two variants are theoretically equivalent, even though they appear to represent the world differently. I will then discuss where this leaves the naturalistically minded metaphysician trying to use our empirically successful theories as a guide to the structure of the world.