

""Between realism and anti-realism? Theory-progressivism about fundamental physics""

Abstract:

I aim to clarify the sense of theoretical progress that we can attribute to fundamental physics. I am concerned with some traditional questions concerning scientific realism vs. revolutions. How to square the (possibility of) radical changes in our fundamental theories--- exemplified by the shift from Newtonian gravity to Einstein's general relativity---with a realist attitude towards science? What has truth got to do with it? Prominent contemporary accounts of theoretical progress and realism answer these questions in terms of accumulation of certain kinds of truths. I argue that these accounts are problematic; we need a broader characterization of theoretical progress (as well as 'realism'), independent of such accumulation of truths.