

Joshua Luczak (Singapore Management University) - Scientific Progress and Robust Bayesian Confirmation

This poster intends to argue that scientific progress occurs within a field whenever there is an increase in the average degrees of confidence (credence) among diverse members of the relevant scientific community. If we think that our scientific theories are confirmed whenever there is a boost in the credence of engaged scientists who begin with reasonable priors and who update their beliefs in light of evidence in accordance with Bayes theorem, and we think that confirmation is closely tied to a theory's truth, then it seems reasonable to think that a scientific field makes progress towards truth whenever there is an increase in the average degrees of confidence among diverse members of the scientific community. By tying progress to increases in the average degrees of confidence among diverse members of the scientific community, we wash out the effects of biases and idiosyncrasies of individual scientists, and so, in this way, obtain a robust result.