MAR17-2016-020593

Abstract for an Invited Paper for the MAR17 Meeting of the American Physical Society

What If Bergson Won?

JOSEPH MARTIN, Consortium for History of Science, Technology, and Medicine, Philadelphia, PA

The Physicist and the Philosopher raises a number of issues about the antagonism of physics toward philosophy that began to emerge in the early-twentieth century. The triumph of Einstein's view of time over Bergson's in the scientific community is nominally indicative of an inflection point at which scientists in general, and physicists in particular, began to command cultural authority and resources once firmly held by philosophers. And yet, twentieth and twenty-first century physics has numerous continuities with its natural philosophical roots in the eighteenth and nineteenth centuries. A counterfactual foray into a Bergson victory can shed some light on the consequences of the counter-philosophical tradition for twentieth century physics.