

## Science and metaphysics: the case of quantum physics

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The paper argues that doing metaphysics requires taking science into account and that doing so implies going as far as to take a stance as to what the appropriate formulation of the scientific theories in question is. I illustrate this claim by considering quantum physics. The famous measurement problem teaches us that answering the very question of what the appropriate formulation of quantum mechanics is requires employing the conceptual tools of philosophy. I first set out a general metaphysical framework that applies to all the different formulations of quantum mechanics (namely ontic structural realism), then consider the three different types of solution to the measurement problem and finally conclude that, despite appearances to the contrary, Bohm's claim to have provided the only ontologically serious formulation of quantum mechanics stands unrefuted.