Bricmont, Jean; Goldstein, Sheldon

Diagnosing the trouble with quantum mechanics. (English) [Zbl 1419.81006]


Summary: We discuss an article by S. Weinberg [“The trouble with quantum mechanics”, N. Y. Rev. Books 2017/01/19, 7 p. (2017)] expressing his discontent with the usual ways to understand quantum mechanics. We examine the two solutions that he considers and criticizes and propose another one, which he does not discuss, the pilot wave theory or Bohmian mechanics, for which his criticisms do not apply.

MSC:

81P15 Quantum measurement theory, state operations, state preparations
81P05 General and philosophical questions in quantum theory
83F05 Relativistic cosmology

Keywords:

trouble with quantum mechanics; Bohmian mechanics; measurement; hidden variables; spontaneous collapse; many worlds

Full Text: [DOI]

References:
