

Heisenberg (and Schroedinger, and Pauli) on Hidden Variables

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Abstract

In this paper, we discuss various aspects of Heisenberg's thought on hidden variables in the period 1927–1935. We also compare Heisenberg's approach to others current at the time, specifically that embodied by von Neumann's impossibility proof, but also views expressed mainly in correspondence by Pauli and by Schroedinger. We shall base ourselves mostly on published and unpublished materials that are known but little-studied, among others Heisenberg's own draft response to the EPR paper. Our aim will be not only to clarify Heisenberg's thought on the hidden-variables question, but in part also to clarify how this question was understood more generally at the time.

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