

Beable-guided measurement theory

Monday 30 October 2023 21:40 (20 minutes)

The measurement process in the deterministic de Broglie-Bohm theory is investigated. The simplest devices for measuring coordinates and momentum are modeled, while both the measurement device and the quantum system are described by the same unified laws. Thus, the problem with the probability distribution in the momentum space, posed in the works \cite{kurt,naun,heim}, is solved. The trajectories of de Broglie particles are calculated numerically. The restoration of the Heisenberg uncertainty principle is verified when the coordinate and momentum are measured alternately.

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Session Classification: In-person poster session & welcome drinks

Track Classification: Theoretical Physics