

## Non-locality and gauge freedom in Deutsch and Hayden's formulation of quantum mechanics

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## **Abstract**

Deutsch and Hayden have proposed an alternative formulation of quantum mechanics which is completely local. We argue that their proposal must be understood as having a form of `gauge freedom' according to which mathematically distinct states are physically equivalent. Once this gauge freedom is taken into account, their formulation is no longer local.

non-locality

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