

Identical Quantum Particles and Weak Discernibility

Dieks, Dennis and Versteegh, Marijn (2007) Identical Quantum Particles and Weak Discernibility.

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Abstract

We examine a recent argument that ``identical'' quantum particles with an anti-symmetric state (fermions) are weakly discernible objects, just like irreflexively related ordinary objects in situations with perfect symmetry (Black's spheres, for example). We conclude that the argument uses a silent premise that is not justified in the quantum case.

Keywords: Quantum statistics, indistinguishable particles, weak indiscernibility, Leibniz's principle

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ID Code: 3208

Deposited By: [Dieks, Dennis](#)

Deposited On: 03 March 2007

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