Derivation of the Symmetry Postulates for Identical Particles from Pilot-Wave Theories

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Abstract

The symmetries of the wavefunction for identical particles, including anyons, are given a rigorous non-relativistic generalisation within pilot-wave formulations of quantum mechanics. In particular, parastatistics are excluded. The result has a rigorous generalisation to n particles and to spinorial wavefunctions. The relation to other non-relativistic approaches is briefly discussed.

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