

Quantum Sortal Predicates

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Abstract

Sortal predicates have been associated with a counting process, which acts as a criterion of identity for the individuals they correctly apply to. We discuss in what sense certain types of predicates suggested by quantum physics deserve the title of 'sortal' as well, although they do not characterize either a process of counting or a criterion of identity for the entities that fall under them. We call such predicates 'quantum-sortal predicates' and, instead of a process of counting, to them is associated a 'criterion of cardinality'. After their general characterization, it is discussed how these predicates can be formally described.

Keywords: Sortal logic, sortal predication, quantum mechanics.

Subjects: [Specific Sciences: Physics: Quantum Mechanics](#)

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