

Quantum entanglement and a metaphysics of relations

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Abstract

This paper argues for a metaphysics of relations based on a characterization of quantum entanglement in terms of non-separability, thereby regarding entanglement as a sort of holism. By contrast to a radical metaphysics of relations, the position set out in this paper recognizes things that stand in the relations, but claims that, as far as the relations are concerned, there is no need for these things to have qualitative intrinsic properties underlying the relations. This position thus opposes a metaphysics of individual things that are characterized by intrinsic properties. A principal problem of the latter position is that it seems that we cannot gain any knowledge of these properties insofar as they are intrinsic. Against this background, the rationale behind a metaphysics of relations is to avoid a gap between epistemology and metaphysics.

Keywords: entanglement, holism, intrinsic properties, metaphysics, non-separability, relations, structural realism

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