

Group Structural Realism

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Abstract

We present a precise form of structural realism, called 'group structural realism,' which identifies 'structure' in quantum theory with symmetry groups. However, working out the details of this view actually illuminates a major problem for structural realism; namely, a structure can itself have structure. This paper argues that, once a precise characterization of structure is given, the 'metaphysical hierarchy' on which group structural realism rests is seen to be overly extravagant and ultimately unmotivated.

Keywords: structural realism, group theory, quantum mechanics, realism

[General Issues: Theory Change](#)

[Specific Sciences: Physics](#)

Subjects:

[General Issues: Realism/Anti-realism](#)

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