

Realism, Relativity and Representation

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Abstract:

The paper argues that Einstein's distinction between '*constructive* and *principle* theories' involves representational claims about physical reality and therefore has implications for the question of realism. Einstein was mostly interested in the latter kind of theory because it imposes fundamental *constraints* on both the phenomena and their scientific representation. The Special Theory of Relativity (STR) represents physical reality in such a way that only the invariant is to be regarded as physically real. This invariance view arises from the imposition of constraints on the reference frames in the STR. A consideration of constraints shows that structures are of central concern in the relativity theory. The concern for structure puts Einstein's views in the vicinity of structural realism.