

# PHILOSOPHICAL FOUNDATIONS OF BOHR-EINSTEIN CONTROVERSY

## ABSTRACT

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Bohr-Einstein controversy is a landmark in the history of twentieth century physics. The controversy started in 1927 in the international congress of physicists at Como and continued till death of Einstein in 1955. It passes through three different stages of discussion between the two scientists of which the second stage is important because of its philosophical perspective. In this stage Einstein and his two colleagues, B. Podolsky and N. Rosen published a paper in the journal '*Physical Review*'. We are here interested to bring out the philosophical foundations of the argument of the three authors. The purpose of this paper is to remove some prevailing misconceptions that the philosophical basis of the argument of Einstein and his colleagues was *realism* and that of Bohr was *subjective idealism*. I have argued that Einstein and his colleagues developed their argument on the basis of Kant's *transcendental idealism* and Bohr developed his argument on the basis of *absolute idealism* of Hegel and Fichte. Another prevailing misconception is that Bohr denied causal relation and determinism. It is true that Bohr replaced determinism by probabilism but this does not entail that he had denied causal relation, what he denied is only *causal necessity* and introduced the notion of *probabilistic causality*, the notion that was developed later by C.G Hempel and W.Salmon.