

DO HEISEBERG AND PENROSE ARGUE ABOUT THE SAME AS BOHR AND EINSTEIN DID?

Summary

Controversies between philosophical and scientific standpoints are known to greatly enrich the human intellectual endeavour. For example, the famous controversy on the nature of the universals appears at present in the context of the philosophy of mathematics. The issue of the ontological status of quantum mechanics gave rise to a clash between two most prominent minds of the early 20th century physics: Albert Einstein and Niels Bohr. A renowned contemporary mathematician, Michael Atiyah maintains, that the contemporary split between Roger Penrose and Stephen Hawking is to a certain degree the continuation of the Bohr – Einstein controversy. In his paper it is argued that Atiyah's thesis holds only in a very approximate way. Arguments of physical and philosophical import show that Penrose and Hawking draw from the scientific legacy of both Bohr and Einstein and thus do not mirror the scheme of the disputation of their venerable predecessors.