

ARISTOTELIAN AETHER AND VOID IN THE UNIVERSE

The question of whether the cosmic space in which celestial bodies move is a void or filled with something has been considered even in the ancient Greece. Whether certain material fills the void in the universe and what is its nature has been discussed throughout the centuries, even in modern physics.

The philosopher who was particularly interested with this question was Aristotle, who argued that the cosmic space behind the Moon is not a void but filled with aether. In this paper is discussed Aristotelian view of the aether, a material which fills the space between the celestial bodies, which he considered as superior to the four primary elements, fire, air, water and earth.

Then, the concepts formulated in the 17th century, which describes the aether as a medium which transmits light through the empty cosmic space and allows an explanation of gravity, have been discussed, as well as the aether in the Maxwellian theory of electromagnetism, the negative result of the Michelson-Morley experiment, the role of Lorentz and of the Einstein's theory of relativity.

At the end has been considered what, in accordance with contemporary theories, permeates the cosmic space, which, as considered Aristotle, is not a complete void.

Key words: aether, Aristotle, cosmic void, history of science