1011-00-11 Sir Michael Atiyah\*, University of Edinburgh. The nature of space.

For more than two thousand years philosophers, mathematicians and physicists have struggled to understand the nature of space. Kant studied the role of the human mind, mathematicians examined the logical ramifications of space, and physicists investigated experimental phenomena. The story continues to the present day, with increasingly exotic scenarios of vibrating strings in ten dimensional space-time. I shall review the history and present status of the great philosophical controversies in the light of modern developments. (Received May 04, 2005)