

TIME DIMENSION: EXPLORATION FROM SCIENCE, PHILOSOPHY AND SPIRITUALITY

Ramagopal Uppaluri

Department of Chemical Engineering

Indian Institute of Technology Guwahati, India

Abstract: The purpose and meaning behind time dimension in nature has been researched for more than 5000 years by scientists, theologians and philosophers and is yet to be completely understood. This paper addresses various conceptions deduced to date, in order to understand time dimension from science, philosophy and spirituality. The explorations from science include a) space time curvature (propounded by Gödel), b) special and general relativity (Albert Einstein), c) the three arrows of time (physical, psychological and cosmological arrows) and their directions, d) multiple arrows of time, e) time symmetric and asymmetric laws, f) Big-Bang & time dilemma, g) Impossibility of backward time travel, h) time dimension and neural mechanisms, i) emergence of time versus space-time, thereby highlighting certain fundamental questions that are unanswered by science. An exploration of time dimension from philosophy conveys various divergent theories that debate upon the concept of absolutism versus relationism, illusion versus dynamic time theory, etc. which may or may not have broader insights from science. Finally, the paper provides insights from major spiritual disciplines such as Vedanta, Christianity and Islam to understand and conceptualize time dimension. Based on these conceptions, it is inferred that a concise theory on time dimension shall be developed incorporating concepts from Philosophy (intuitions) and Spirituality (axioms) integrated with science (experimental insights). In other words, based on advances in science and refinement in traditional thought, time dimension as a competent platform for the synthesis of science and spirituality can provide vital breakthrough in scientific understanding of time. Thereby, problems that need to be addressed within the discipline of science have been emphasized for furthering our understanding on time dimension, its purpose and meaning.