Birth and development of quantum physics: a transdisciplinary approach

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Abstract: The last century has been a period of extreme interest for scientific research, marked by the overcoming of the classical frontiers of scientific knowledge. Research oriented towards the infinitely small and infinitely big, in both cases beyond the borders of the visible. Quantum physics has led to a new Copernican revolution, opening the way to new questions that have led to a new view of reality. At the same time, new theories have developed, involving every field of science, philosophy and art, rediscovering the link between unity and totality and the importance of human potential. In a transdisciplinary approach we consider quantum field theory, new ideas on the concepts of vacuum and entanglement, metaphysical aspects of quantum revolution and the introduction of different interpretative approaches on the “Whole”.

Keywords: Modern physics, Infinity, Vacuum, Entanglement, Education, Human being, Metaphysics.

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