Symmetry Breaking by Electric Discharges in Water and Formation of Light Magnetic Monopoles in an Extended Standard Model (Part I)

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Z. Naturforsch. 66a, 205-214 (2011); received August 19, 2010 / revised November 24, 2010

By Lochak (theory) and Urutskoev (experiment) the hypothesis has been suggested that during electric discharges in water (fluids) light magnetic monopoles can be created which according to Lochak should be considered as a kind of excited neutrinos. Based on a quantum field theoretic development of de Broglie's and Heisenberg's fusion ideas and the results of preceding papers a transparent proof is given that such magnetic monopoles can occur during discharges. In the theoretical description these circumstances are formulated within the scope of an extended (effective) Standard Model and the monopoles with vanishing electric charge arise from neutrinos whose states are modified by the symmetry breaking caused by the discharge. In the introduction some technical implications are referred to. The article is divided into two parts.

Key words: Supersonic Spark Discharges in Water; Nuclear Transmutations