

Abstract Submitted  
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**On the Correct Analysis of the Foundations of Theoretical Physics** TEMUR Z. KALANOV, Home of Physical Problems, Pisatelskaya 6a, 700200 Tashkent, Uzbekistan — The problem of truth in science – the most urgent problem of our time – is discussed. The correct theoretical analysis of the foundations of theoretical physics is proposed. The principle of the unity of formal logic and rational dialectics is a methodological basis of the analysis. The main result is as follows: the generally accepted foundations of theoretical physics (i.e. Newtonian mechanics, Maxwell electrodynamics, thermodynamics, statistical physics and physical kinetics, the theory of relativity, quantum mechanics) contain the set of logical errors. These errors are explained by existence of the global cause: the errors are a collateral and inevitable result of the inductive way of cognition of the Nature, i.e. result of movement from formation of separate concepts to formation of the system of concepts. Consequently, theoretical physics enters the greatest crisis. It means that physics as a science of phenomenon leaves the progress stage for a science of essence (information). Acknowledgment: The books “Surprises in Theoretical Physics” (1979) and “More Surprises in Theoretical Physics” (1991) by Sir Rudolf Peierls stimulated my 25-year work.

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