

Abstract Submitted
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On a New Theory of Physical Vacuum TEMUR Z. KALANOV,
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new theory of physical vacuum is proposed. This theory is based on the principle
of unity of formal logic and dialectics. It is shown that physical vacuum does not
represent system of material objects, not consist of particles, fields, bodies and is
neither a particle, nor a field, nor a body. Therefore, vacuum has no properties (for
example, energy, size) and, hence, does not interact with the objects of Nature. It
means that both measure of vacuum energy and measure of vacuum information are
equal to zero. Physical vacuum is matter in the state of absolute zero of energy
and information. Thus, the new theory represents the philosophical solution of the
problem of physical vacuum. This philosophical solution is the unique-permissible,
rigorous, complete, general theoretical proof of existence of physical vacuum.

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