

# Propagation of waves in the medium at the intersection of zones of anomalous thermodynamics

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Interesting effects occur when waves pass through the zone of anomalous thermodynamics (AT), i.e., in such a way that the states of matter affected by the wave are both in the AT zone and outside it. In particular, during compression, in P-V coordinates, instead of a single continuous shock adiabat for normal matter, or a single continuous compression isentrope for anomalous matter, a generally discontinuous line is obtained in the regions of two-wave and three-wave solutions. including sections of various shock adiabats and compression isentropy.

The theoretical analysis of wave configurations and numerical calculations using the equation of state of nitrogen with zones of anomalous thermodynamics are carried out.