Unified Non-Local Theory of Transport Processes. Edition No. 2

Description: Unified Non-Local Theory of Transport Processes, 2nd Edition provides a new theory of transport processes in gases, plasmas and liquids. It is shown that the well-known Boltzmann equation, which is the basis of the classical kinetic theory, is incorrect in the definite sense. Additional terms need to be added leading to a dramatic change in transport theory. The result is a strict theory of turbulence and the possibility to calculate turbulent flows from the first principles of physics.

- Fully revised and expanded edition, providing applications in quantum non-local hydrodynamics, quantum solitons in solid matter, and plasmas- Uses generalized Boltzmann kinetic theory as an highly effective tool for solving many physical problems beyond classical physics- Addresses dark matter and energy- Presents non-local physics in many related problems of hydrodynamics, gravity, black holes, nonlinear optics, and applied mathematics

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